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PLACES WITHIN A SMALL TOWN
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**PLACES WITHIN A SMALL TOWN
HALDEN
NORWAY**

WENCHE M RAMFLØY

Submitted for the degree of Doctor of Philosophy

Heriot-Watt University

Department of Architecture

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ACKNOWLEDGEMENTS

I dedicate the work contained within this thesis to my husband Jørn Ramfløy, for his love, support and encouragement over the years.

Learning to learn is to know to navigate in a forest of facts, ideas and theories, a proliferation of constantly changing items of knowledge. Learning to learn is to know is to ignore but at the same time not rejecting innovation and research.

Raymond Queneau

I would first like to express my gratitude to Halden town planning office, and all staff in the organisation for their invaluable contribution to the present research work.

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ABSTRACT

The thesis addresses how the town of Halden in Norway will be effected by a planned new station and other infrastructure projects to serve the anticipated high speed rail link between Oslo and Gothenburg . It does so by examining how the structure of the town will be affected using a variety of analytical tools. Besides the station other infrastructure projects are planned and these too are critically reviewed especially from the perspective of the pedestrian experience. The thesis is concerned with city form and the role of different urban design methodologies to help restructure and improve the town whilst accommodating the new railway infrastructure.

The research underpinning the thesis follows from the authors design project undertaken as part of the Diploma in Architecture in 1994 and subsequently at Masters level. Earlier work concentrated on understanding the characteristics and opportunity for urban change in the town, the need for infrastructure improvement, and the capacity for change concerning the town in general and the area around the station in particular.

As a starting point for this thesis, a detailed examination was undertaken of the physical situation using tools such as space syntax analysis. This was then extended into the analysis of different possible future restructuring possibilities beyond those anticipated using tools beyond space syntax. The thesis argues that it is important to examine how different future infrastructure possibilities could influence physical change in different geographical areas of the town.

The main issue of the PhD thesis is how to direct possible future changes in order to create a better movement pattern in the town (especially for pedestrians) and how this in turn will help improve the town's most vulnerable places. In order to examine in detail the attitude of the town's people to the future, a questionnaire was used to elucidate criticism of the existing town, its places and comment on the needs and potential opportunities for the future. One of the products of the thesis is to shed light on the public perception of the most relevant and valuable places in the town and to clarify the function and usage of the past in order to guide future change. Each of these places was identified and examined in terms of how they interact with the town's new structure and how through urban design analysis they could be integrated to create a town with an improved physical environment.

The use of the questionnaire survey and space syntax together made it test the hypothesis that "A people-friendly town is not just a collection of people-friendly places but a linked network of these so integrated into a coherent whole that the overall settlement can readily perceived and effectively planned". This was confirmed and allowed answers to the following research questions:

- How is integration achieved in the context of the whole town?
- What are the indicators of overall quality in the context of public places in Halden?
- What lessons can be learned from Halden that have wider application?

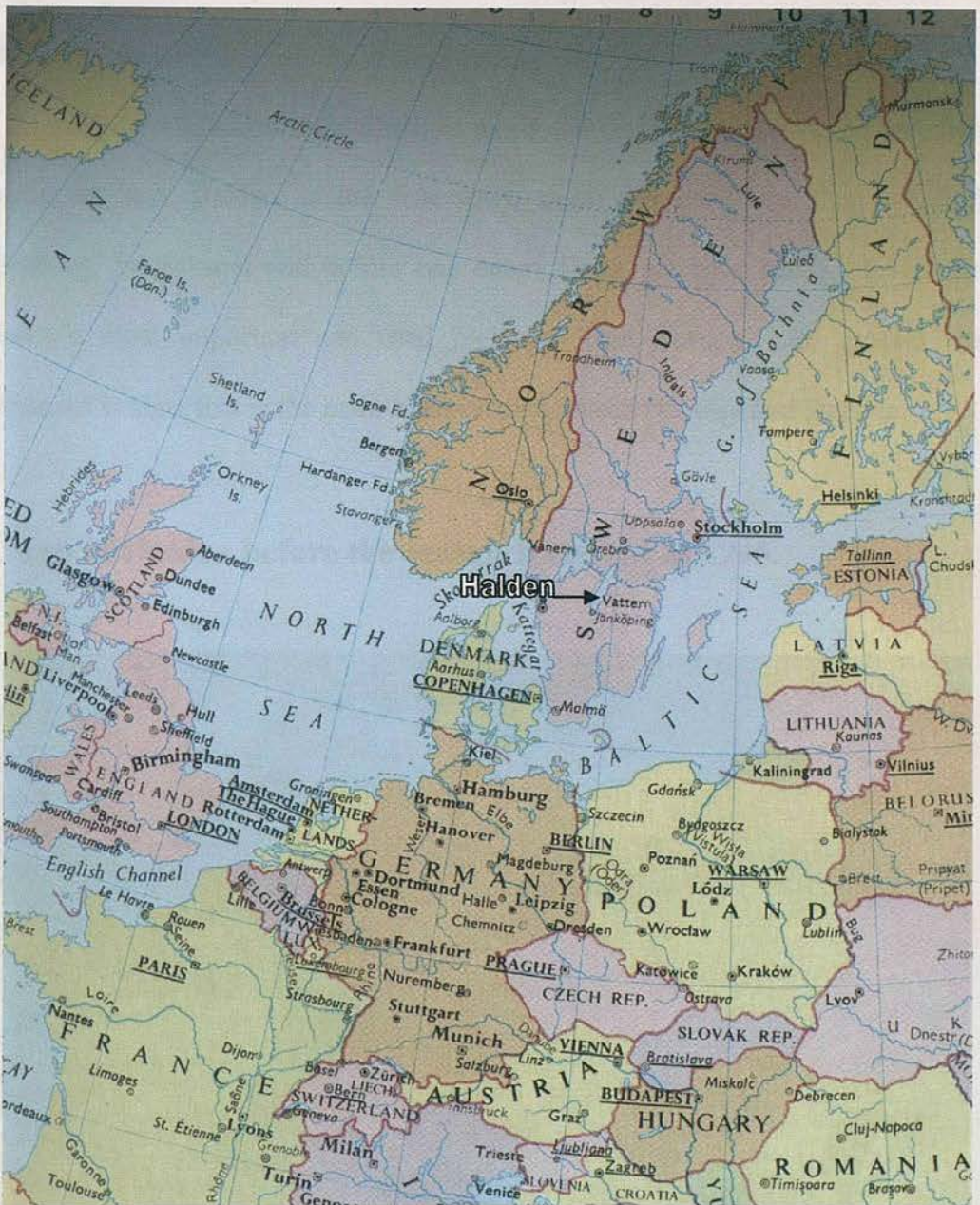
The lesson learned from Halden which has a wider application, is that the smallest need of change can create the greatest opportunity to achieve better integration in the context of the whole town. This can then create the opportunity for improvement of the overall quality in the context of public places in the town.

PREFACE

A chronology of author's studies of Halden.

Diploma in Architecture	1994-1995	<ol style="list-style-type: none"> 1 Initial survey of the town plan 2 Gather information regarding the town's history 3 Establish contact with the local authority 4 Establish contact with the Norwegian Railway Company 5 Investigation of the method Space Syntax 6 A space syntax analysis was carried out 7 Developed a thorough analysing system of the town as a whole 8 A detailed examination of the demanding physical situation was undertaken of the town
MSC (Urban Design)	1995-1996	<ol style="list-style-type: none"> 1 A thorough investigation of the usefulness of a questionnaire 2 Design of a questionnaire 3 Investigation of the town's past and present 4 Gather information of peoples visions for the future in Halden
PHD (transfer from Master) Part time	1996-present	<ol style="list-style-type: none"> 1 Created hypothesis for testing 2 Designed research questions 3 Collaboration through practice with the local authority 4 Collaboration through practice with the local planning office 5 Collaboration through practice with the inhabitants 6 Collaboration through practice with the NSB 7 Research of all places in the town's inner centre for selection 8 Further investigation of ten selected places in the town 9 A thorough investigation of people's behaviour in urban situations 10 Observation methods was carried out 11 Design of a new relationship between the experimental Space Syntax method and the questionnaire was developed 12 A chart was created to calculate the best solution 13 A list of criteria was developed 14 Conclusion, original contribution and recommendations was carried out

Location of Halden

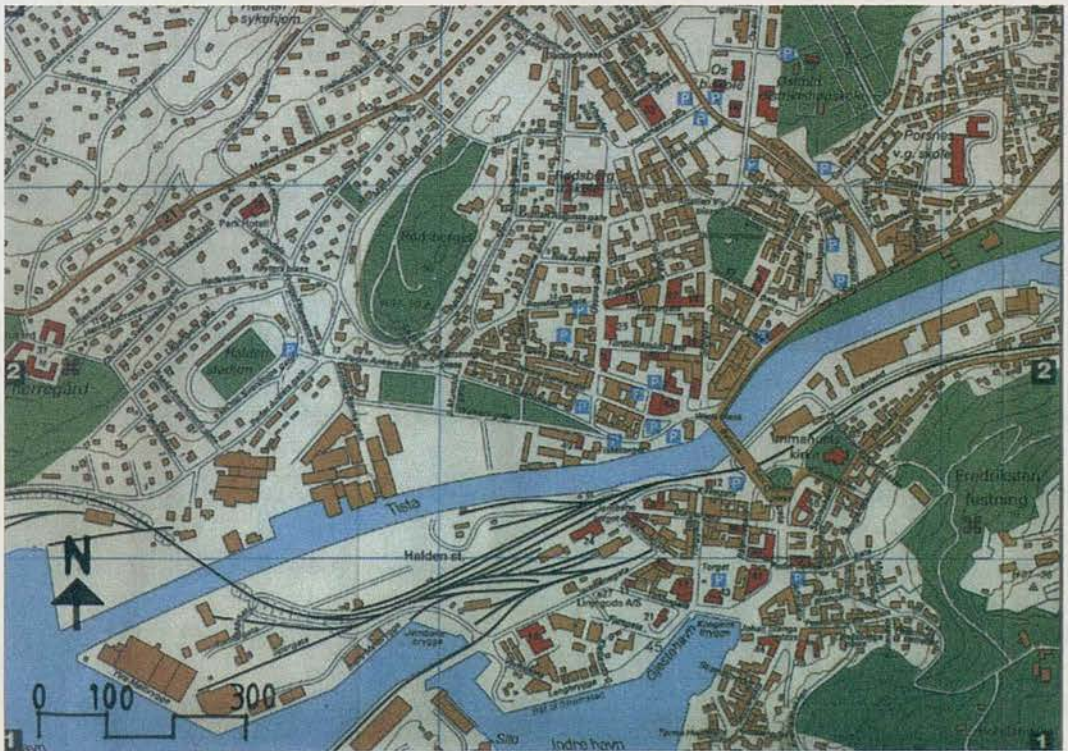


This project is about Halden. Halden is a small border town in Norway, located in a county called Østfold. Østfold is located in the south-east corner of Norway, stretched between the Swedish border in the south and Oslo. The county is small but heavily populated. It is the next smallest county in Norway, just 100 km long and 80 km wide with quarter of a million inhabitants. In the east it

borders foreign country Sweden and in the south to the sea and the ocean. The county Østfold is the portal to and from Europe and that is well recognised in industry, trade, economical life, culture and history.

Østfold has four municipalities along the Oslo fjord. From the Swedish border we have Halden as the first town along the E6 route, then we find Sarpsborg, Fredrikstad and before one enters Oslo, we have Moss. E6 is the country's most important and used highway from Europe. E6 crosses the Svinesund bridge, that is the main connection between Norway and Sweden.

Map of Halden before the research started in 1995.



NOTE: See also appendix 2 and 3.

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INTRODUCTION

“A central part of research activity is to develop an effective research strategy or design. This will detail the most suitable methods of investigation, the nature of the research instruments, the sampling plan and the types of data as quantitative or qualitative. The research design forms the framework of the entire research process”.¹

The process of research is often subject to many sources of bias, therefore the author has carefully analysed and selected the methods of research and data collection most suitable for this project. The multi-technique approach is defined by the desirability of using several different methods, which together make up a sound research strategy. In most cases, it is not so much a case of which technique/method that is best, but which set of techniques/methods serves the purpose of the project best.²

To perform the research in a well-structured way, this thesis uses the main points in Chisnall's five-step research model.³ It is important to note that every research problem is unique in its own way, however, there are number of steps that are common to all studies. Therefore, a model is very useful, both for the researcher and the reader of the study, in order to enable both parties to follow and see each step in context.

¹ Peter M. Chisnall, Marketing Research, (4th Edn) 1992 (p.23). A combination of both quantitative and qualitative research is used in the thesis.

² Peter M. Chisnall, Marketing Research, (4th Edn) 1992 (p.28). The timing of each method can be crucial for the result.

³ Peter M. Chisnall, Marketing Research, Methodologies of marketing research, (4th Edn) 1992 (p.25).

PART ONE BACKGROUND

- Stage 1. Research brief → problem definition.
- Stage 2. Research proposals → choice of research design.
- Stage 3. Data collection.
- Stage 4. Data analysis and evaluation.
- Stage 5. Preparation and presentation of the research report.

1.2. Research proposal

It is important to define research design as a work plan, showing in detail the most suitable methods of investigation and how desired information can best be collected, given the research problem. To quote G.A. Churchill Jr. "A research design is simply the framework or plan for a study used as a guide in collecting and analyzing data. It is the blueprint that is followed in completing a study".¹ The main purpose of the research design is to enable the researcher to address the relevant research questions. There are, according to Churchill, three types of research designs: exploratory, descriptive and causal designs.²

¹ Gilbert A. Churchill Jr. "Research Design", in *Strategic Research* (4th Edn) 1967 (p. 81)
² Gilbert A. Churchill Jr. "Research Design", in *Strategic Research* (4th Edn) 1967 (pp. 71-73)

PART ONE BACKGROUND

CHAPTER 1 RESEARCH METHOD, HYPOTHESIS, QUESTIONS AND STRUCTURE

1.1. Research brief

The definition is discussed and contains issues relating to Halden such as: the need, opportunities and the capacity for change; the problem with the bad connection between spaces; and under-usage of spaces. To understand these issues, the town is examined in the context of its past, present and future.

1.2. Research proposal

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⁴ Gilbert A. Churchill Jr. "Research Design", in Marketing Research, (4th Edn) 1987 (p.71).

⁵ Gilbert A. Churchill Jr. "Research Design", in Marketing Research, (4th Edn) 1987 (pp. 71-72).

Exploratory design:

“Exploratory design is concerned with identifying the real nature of the research problem”.⁶ “Hence, exploratory design is used to gain insight and ideas”.⁷ It is used, therefore, in this thesis to develop a hypothesis and propositions. Town planning, as a concept, has been widely discussed and written about in many books and journals but few texts relate it to Halden’s specific problem. It was necessary, therefore, to make the first part of the research exploratory. This enabled the researcher to gain a better insight into the usage of places and how they interacted with each other in a small town. She would then gain a better knowledge of this specific type of town planning and be able to relate this to Halden and it would provide her with the opportunity to study both the past and the present situation in Halden.

Descriptive Design:

According to Chisnall, descriptive design stems from substantial prior knowledge and is used when the research is intended to describe characteristics, to estimate or to make predictions.⁸ In the empirical research of the study, the researcher has decided to use descriptive research. In the theoretical analysis, the exploratory research propositions will be developed related to the research area.

⁶ Peter M. Chisnall, “Methodologies of Marketing Research” in Marketing Research, (4th Edn) 1992 (p. 23).

⁷ Gilbert A. Churchill Jr. “Research Design”, in Marketing Research, (4th Edn) 1987 (p.72). The basic purposes are those suggested by Selltitz, Wrightsman, and Cook, “Research Methods”.

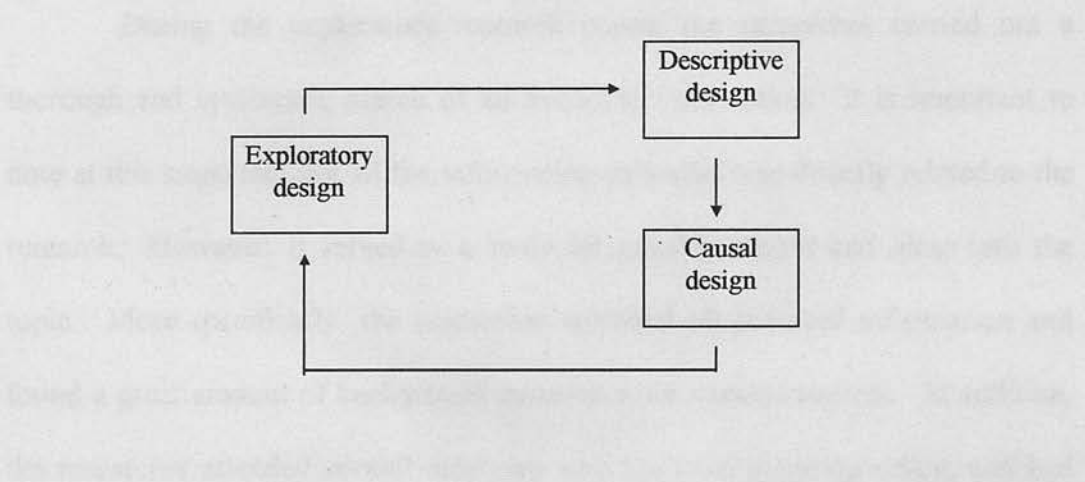
⁸ Gilbert A. Churchill Jr. “Research Design”, in Marketing Research, (4th Edn) 1987 (p 81).

Causal Design:

The main purpose of casual design is to investigate and determine “cause and effect” relationships. Causal studies typically take the form of market behaviour and how to evaluate their relationships and interactions.⁹ Since Halden is today facing great transformation, where the opportunity and impact of cause and effect is significant, this type of design study is very relevant to the author’s study.

Relationship among the research designs

It is important to notice that the three types of research design, “exploratory, descriptive and causal” can be viewed as a continuous and inter-related process.



Consequently, many research studies start with an exploratory phase due to a lack of knowledge about the research problem. The exploratory research is then followed by descriptive research.¹⁰ This is the approach that has been adopted in the thesis.

⁹ Peter M. Chisnall, “Methodologies of marketing Research” in *Marketing Research*, (4th Edn) 1992 (p 24). For a broader insight see; Gilbert A. Churchill Jr. “Causal Design”, in *Marketing Research*, (4th Edn) 1987 (pp 103-142).

¹⁰ Gilbert A. Churchill Jr. “Research Design”, in *Marketing Research*, (4th Edn) 1987 (pp 73-74).

1.3. Data collection

As stated previously, the research study consists of three main types of research designs: exploratory, descriptive and causal. The first phase of the research relies upon secondary data. In the latter part of the research study, the descriptive research, the researcher uses primary collected data.

Secondary data:

According to Chisnall, secondary data is extant information that may be useful for the purpose of specific surveys. This may be available:

- Internally: *Existing information close to the researcher.*
- Externally: *Existing information that needs to be collected from other sources.*

During the exploratory research phase, the researcher carried out a thorough and systematic search of all available information. It is important to note at this stage that not all the information collected was directly related to the research. However, it served as a basis for gaining insight and ideas into the topic. More specifically, the researcher searched all potential information and found a great amount of background material from various sources. In addition, the researcher attended several meetings with the local planning office, and had access to all information stored within the organisation concerning the topic. The co-operation with the local planning office has been of great importance for the research process. The thesis also refers to the list of references for detailed presentation of the sources.

Primary data:

According to Chisnall, primary data is data that has been collected for the first time by either one or a blend of:¹¹

- Observation
- Experiments
- Questionnaires.

To be able to make the research as effective and realistic as possible, the researcher has chosen to use all three options.

Observation:

The technique used for the observation, was the “post occupancy evaluation and redesign of urban places” method. This method was developed by Professor Clare Cooper-Marcus and has been used successfully to evaluate places in several cities. This method would be useful in the following two ways:

1. To redesign a particular urban park, playground or plaza which apparently is not in keeping with today’s needs. After evaluation of how any space functions, the information can be gathered as input to any redesign programme.

2. To design a neighbourhood park for a new residential community. To do this, evaluate some existing open spaces to see how they function for the users, and use the information gathered as input to the design programme for the new

¹¹ Peter M. Chisnall, “Methodologies of marketing Research” in Marketing Research, (4th Edn) 1992 (pp 25-28).

park. The method is utilised by sensing and feeling the space. Sensing as defined as experiencing through our senses is:¹²

Sight

Hearing

Touch

Smell

Taste

Experiments:

The technique for the “experiment” part was the “space syntax” method. In a town where the road and pedestrian system is about to go through a transformation, space syntax seems to be a good choice. Space syntax was developed principally by Bill Hillier at the Bartlett School of Architecture in London in the 1980s. It is a method of analysing settlements and their structure. Space syntax analysis, where used on existing towns, can be useful in so far as it tells us which route will be used most by people. If this route or collection of convex spaces is different from the one that the design had envisaged, one can assume that the resources were used inefficiently. When using space syntax analysis on our own projects, it enables designers to know which will be the integration core and therefore allows us either to influence it, or make architecture reflect it.¹³

It is important to note that the programme used in the research is an Edinburgh College of Art (ECA)-developed version of Space Syntax. It should not be confused with the newer interactive computer modelling tool “Axman” (the Bartlett software). The ECA version has limitations compared to Axman, which is a more developed software. “Axman uses graph-theoretic techniques to analyse the pedestrian movement system and calculate which routes are more accessible

¹² For more information see: Markus Clare Cooper, Design Guidelines, a bridge between research and decision making, 1985. Information from Professor Robert Smart Nov 1995.

¹³ A school report written by Martin Jose Echenique, An explanation of space syntax and its possible use in museum design, ECA, Heriot Watt University Nov. 1991

than others. Using the Axman software, the computer automatically colours the most accessible routes".¹⁴ The ECA version also automatically colours the routes by accessibility. In this research, the author has used the ECA version to calculate the pattern of a settlement made by the 10% of most integrated lines and the bottom 50% of integrated lines. In spite of its limitations compared to "Axman", the ECA model of space syntax provided a useful tool to the experimental investigation into the urban structure of Halden.

Questionnaires:

The general form of questionnaires lies between two extremes. At one end of the continuum lies a highly structured questionnaire, consisting of a series of formal questions designed to attract answers of limited response. Standardised questions are administered in the same way to allow respondents to speak freely.

At the other extreme, is the unstructured questionnaire, where formal questions are replaced by a freer style of investigation. These extremes are recognised as closed and open-ended questions.¹⁵ The researcher chose to design a questionnaire with a mix of styles in order to address the full range of topics raised (see Appendix 1) and had two potential alternatives for primary data collection: quantitative or qualitative methods.

¹⁴ An article by Mark David Major and Tim Stonor, Designing for context: the use of space syntax as an interactive design tool in urban developments, 1997. URL:

[/http://www.spacesyntax.com/publication/context.htm](http://www.spacesyntax.com/publication/context.htm)

¹⁵ Peter M. Chisnall, "Questionnaires" in Marketing Research, (4th Edn) 1992 (p.109).

Quantitative method - statistical generalisation:

To quote Yin, "In statistical generalisation an inference is made about a population on the basis of empirical data collected about a sample."¹⁶ In quantitative analysis, conclusions can be drawn about a population based on objective data from a sample. The main advantage is that the data collected and the following analysis is rather straightforward. However, the main flaw is that there are limitations related to the depth of the information that is possible to collect and analyse.

Qualitative method - analytical generalisation:

To quote Yin, "analytical generalisation is in which a previously developed theory is used as a template with which to compare the empirical result."¹⁷ In other words, primary data is compared to theory. Qualitative methods do not have the basis for statistical generalisation. They are characterised by the fact that they demand a lot from both the interviewer and interviewee. The interviewer needs to be highly skilled because he/she needs to be able to take advantage of the situation as it arises during the conversation. Hence, it requires that the research design needs to be flexible. There are four main types of qualitative methods:

- In-depth interviews
- Focus groups
- Projective techniques
- Case studies.

¹⁶ Further reading, see: Robert K. Yin, Case Study Research, Design and Methods, (2th Edn) Vol.5, 1994. For a systematic treatment of questionnaire construction, see the classic work by Stanley L. Information from Professor Robert Smart, Nov 1995.

¹⁷ *Ibid.*

The researcher has chosen case studies. Therefore, the other methods will not be discussed.

Choice of case studies:

To quote Yin, a case study is an empirical inquiry that:

1. Seeks to answer “How” and “Why” research questions. “How” and “Why” questions deal with operational links needed to be traced over time, rather than mere frequencies or incidence. If the research asks other questions, another design could be chosen.
2. Is used to examine contemporary events. Here, “events” means organisations, processes etc. It is important to note that these events should be ongoing.
3. Is preferred when the event itself cannot be separated from the environment, therefore, it is difficult for the researcher to gain control over the behaviour during the event.
4. Has the ability to handle a variety of evidence.¹⁸

Furthermore, the data collection is characterised by unstructured interviews with key people in the organisation in question. Case studies demand a considerable amount of resources, in terms of time and effort. In this research, the researcher asks “How” and “Why” questions related to the strategic planning of Halden. More specifically, “How/why does the organisation of planners

¹⁸ Further reading, see: Robert K. Yin, Case Study Research, Design and Methods, (2th Edn) Vol.5 1994. For a systematic treatment of questionnaire construction, see the classic work by Stanley L. Payne, The Art of Asking Questions, (Princeton, N.J.: Princeton University Press), 1951.

implement strategic planning and “How can this improve decision-making?” This is also related to the opportunity for change, the need for change and last but not least, the capacity for change.

1.4. Data analysis and evaluation

The analysis is focused on the developed propositions and the results of the raw material are evaluated and discussed. An evaluation will then be able to make proposals for the future. Significant relationships are identified and discussed clearly and objectively in connection with the specific problems of the research (see diagram, HALDEN, p.15). This will make it very easy for the reader to get the answers to the research problem.

The author designed a new and different relationship between the experimental Space Syntax method and the questionnaire. The idea was developed when the author had fourteen different Space Syntax solutions in front of her. The axis was altered on all fourteen street maps created by the Space Syntax, resulting in fourteen different solutions of where people most likely would be and an indication of the best location for vehicles. Two questions were raised:

1. Who should decide which street map, created by Space Syntax, is best for the town's future?
2. And why?

One solution was that the researcher with her background and knowledge about the town, could just select the one she felt would benefit the town best. It was decided that the research had to be more scientific than that. As a result, a chart

was created to calculate the best solution. A list of criteria was developed to meet the town's need and opportunity for the future. The inhabitants had the opportunity to express their needs by answering the questionnaire. The chart developed a system where the inhabitants decided which Space Syntax solution would be the most favourable for the town's needs and opportunities (for more detailed information, see Part Three).

It was deduced from this analysis of research methods that although researchers may amass a mountain of data, it is useless unless the findings are interpreted in the light of the problem at hand. Data analysis involves three main steps: first, the data collection forms must be scanned to be sure that they are complete and consistent and that the instructions has been followed. This process is called editing. Second, the forms once edited, have to be coded. Coding involves assigning numbers to each of the answers so that they may be analysed, typically by computer. Finally, the data has to be tabulated. This refers to the orderly arrangement of data in a table or other summary format.¹⁹

Hypotheses

Apart from the estimation of population parameters, sampling theory is also concerned with the testing of statistical hypotheses. Decisions have frequently to be taken on the basis of information obtained in sampling, and in the process of reaching such decisions, certain assumptions have to be made about the population under survey.²⁰

¹⁹ Gilbert A. Churchill Jr. "The Research Process and Problem Formulation ", in Marketing Research, (4th Edn) 1987 (p. 27).

²⁰ Peter M. Chisnall, "Statistical analysis" in Marketing Research, (4th Edn) 1992 (p.329).

The hypothesis concerning this thesis is: “A people-friendly town is not just a collection of people-friendly places but a linked network of these so integrated into a coherent whole that the overall settlement can be readily perceived and effectively planned.”

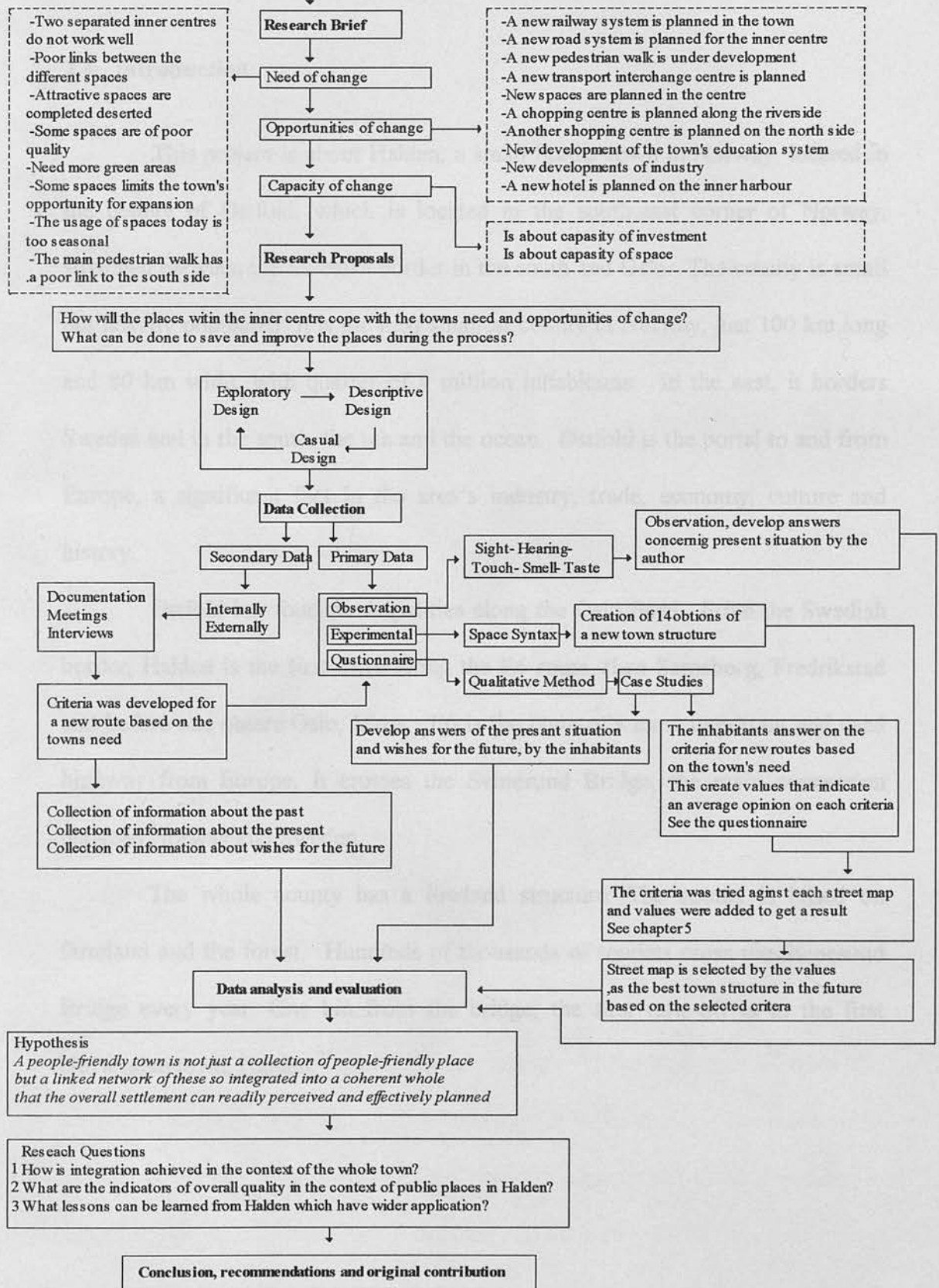
Research Questions

- 1) How is integration achieved in the context of the whole town?
- 2) What are the indicators of overall quality in the context of public places in Halden?
- 3) What lessons can be learnt from Halden which have wider application?

1.5. Preparation and presentation of research report

The thesis is structured so that the first question is addressed in Chapter 2, the second in Chapters 4 and 5, and the third in Chapters 6 and 7. Necessarily, certain questions exist as theirs running through the thesis. Hence, the conclusion of the thesis seeks to provide an integrated answer to the issue raised through the examination of Halden as a place and to the theoretical perspectives raised as contiguous.

HALDEN



CHAPTER 2 HALDEN: THE HISTORICAL, GEOGRAPHICAL AND PLANNING CONTEXT

2.1. Introduction

This project is about Halden, a small border town in Norway, located in the county of Østfold, which is located in the south-east corner of Norway, stretched between the Swedish border in the south and Oslo. The county is small but heavily populated. It is the next smallest county in Norway, just 100 km long and 80 km wide, with quarter of a million inhabitants. In the east, it borders Sweden and in the south, the sea and the ocean. Østfold is the portal to and from Europe, a significant fact in the area's industry, trade, economy, culture and history.

Østfold has four municipalities along the Oslo fjord. From the Swedish border, Halden is the first town along the E6 route, then Sarpsborg, Fredrikstad and before one enters Oslo, Moss. E6 is the country's most important and used highway from Europe. It crosses the Svinesund Bridge, the main connection between Norway and Sweden.

The whole county has a lowland structure. The county is based on farmland and the forest. Hundreds of thousands of tourists cross the Svinesund Bridge every year. One km from the bridge, the first turn off is to the first Norwegian town, Halden.²¹

²¹ As reference, see the local county guide by Scan Partner Forenede AS, Østfold ved Oslofjorden, Møklegaards Trykkeri, Fredrikstad

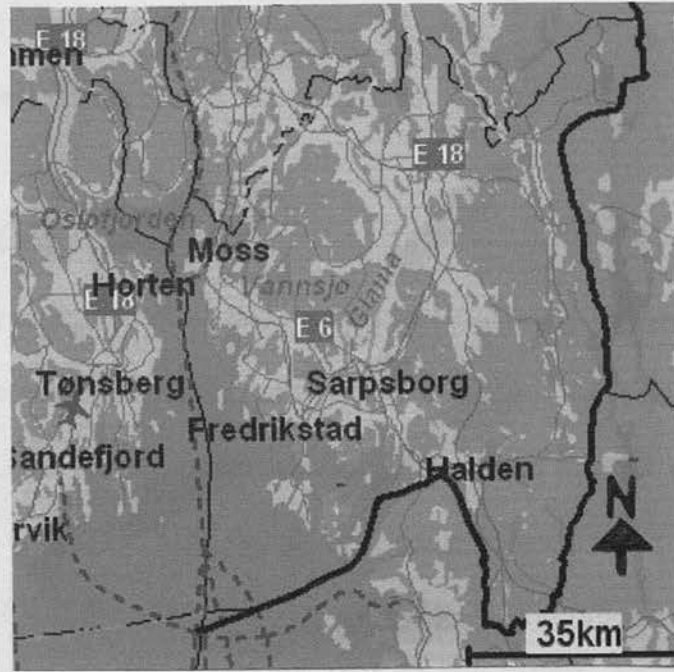


Figure 1. Østfold county.

2.1.1. Halden today

Halden is a town with 26,000 inhabitants and covers an area of 640 km². The town is a typical industrial town with the paper factory as the most important industry. In addition, the town has about 70-80 small and medium-large companies. It has also developed highly regarded educational institutions with research centres of high quality. Halden is a town with numerous attractions. The greatest of these is the Fredriksten fortress, a national treasure, visited by about 200,000 people annually. In day time, it is a gigantic theatre backdrop, a fairytale castle and at night, it is bathed in floodlights. At the foot of the fortress hill, an idyllic small town is spread over a beautiful location along the picturesque Iddefjord. Halden's many architectural pearls can hardly fail to capture the eye, and many of them are clustered together. They form, stylistically, pure little neighbourhoods in the stunning French Empire style, ranging from baroque to postmodernism and are located in the centre of the town. From an architect's

point of view, Halden is a little Mecca. It is surrounded by a great expanse of forest, dotted with many idyllic lakes and tarns.

2.1.2. Fredriksten fortress

At first sight, it is obvious to see that Halden is a town with historical roots. There are traces of settlements in the Halden area that date back more than 8000 years. Looking over the town lies the Fredriksten fortress, an acropolis, the likes of which cannot be found anywhere else in Norway. On the 28 of July 1660, King Fredrik III of Denmark issued a royal declaration ordering that a stronger fortress be built. The fortress had to be close to the new border to Sweden, and should be named Fredriksten fortress. The defence installation started in 1661 and is one of Norway's largest buildings. The fortress was constructed on two parallel ridges. On the north ridge, the walls extend from the Dronning's bastion at the west, to Prince Christian's bastion at the east. The south ridge is fortified with Prince George's bastion and the main Overkongen bastion on the hill's highest point. Between these two ridges lies the citadel with a number of interesting old buildings. Beyond the citadel, the Borgherskansen faces west, overlooking the town from the hillside. In addition, there are three outlying fortifications facing south and east these are: Gylden løve, Stortårnet and Overberget. Fredriksten fortress is the most visited tourist attraction in Norway.

There are a number of monuments at Fredriksten including one that marks the spot where the Swedish King Karl XII was shot during the siege of 1718. There are also several museums at the fortress with extensive collections of historical military and civilian objects. Fredriksten is an imposing structure with a

structure and its clarity is verified by its placement in a dramatic fjord and

total wall surface of 20,000m². Exploring its ramparts and bastions, store-houses and deep mysterious passageways is an experience.



Figure 2. The fortress. (photo: NSB)

2.1.3. The town

Halden has a close and dense town structure, where many of the central buildings have the strong military Empire style. The feeling of the concentrated structure and its clear identity is clarified by its placement in a dramatic fjord and

valley landscape. The town's placement is located at the end of the 14 Norwegian mile-long watercourse that runs out into Iddefjord. This fjord has been a border between Sweden and Norway since the Roskilde peace in 1658. The peace of Roskilde between Sweden and Denmark in 1658, in which Norway lost the Bohuslan province to Sweden, was a dramatic development for Halden. The town became a vulnerable post on the Swedish border, and a strong fortress was erected as a defence against the enemy. On six different occasions, the town was attacked by the Swedes, but the fortress was never captured. In 1659 and 1716, the Norwegians were forced to set fire to the town to drive out the enemy. The Norwegian author Bjørnstjerne Bjørnson cited these events when he included Halden in the national anthem with the words "for we chose to burn our nation, ere we let it fall".²²



Figure 3. Reconstructed battle on the fortress. (photo: Halden Turist guide 95)

²² Local tourist guide for the town Halden, published by: Prosjekt, Reproskan, Moss, Turistbyen Halden, Lyche Grafiske, Drammen 1995.

This special location also explains the other elements in Halden's identity like the industrial town. The timber industry along the river started as early as the 16th century. Along these waterfalls, the 19th century industrial revolution started in Norway, like Halden's cotton spinning mill and factory in 1819, Catrineholm iron foundry in 1826 and Saugbrugsforeningen in 1859. Around 1870, Halden was the country's next largest industrial town. It was just Oslo that was larger.

Halden was also the first town to feel the crisis with the industrial decline of the 60s and 70s, where 3-4000 were unemployed in a short time. Even although Halden created 1-2000 new jobs at that time, the town is still suffering from high unemployment. The town is still a marketable industrial town with about a third of the employment coming from traditional industry. The industries have great plans for future developments in Halden. Saubrgsforeningen's new paper-machine at a cost of 3,2 billion Norwegian kroner, is the Norwegian's largest mainland investment, and started operating in 1993. The river Tista and the Iddefjord, that were very polluted by the paper-factory, have now, as a result of the new factory, seen a rapid and radical improvement.

Halden has also been developed to be Østfold's greatest college town, and together with the town's research centre and developing companies, the town seems to have a great future. It is a paradox that the 60s and 70s deep crises contributed greatly to those large areas of historical buildings which were torn down, as in so many towns and cities at that time. Today all the historical buildings are listed, to develop a more people-friendly environment.

2.2. Development plans, problem-solving and organisation

In the 70s, an intense debate was developed around the historical buildings in Halden's town centre. Problems occurred in the 60s when a structural plan for a more modern car-friendly town was developed, and many old areas were pulled down. New plans, from the Norwegian road plan II in 1974 involved a greater change that resulted in new structural elements and the removal of established town structure and buildings. The process was mainly governed by the road planners and engineers. Even if Halden built less new buildings at this time compared with other Norwegian towns, old and valuable buildings were threatened by ignorance of their merits, their low priority, decay and poor new buildings. The town's old Fredrikshald theatre was saved and restoration started around 1975. With the restoration of the theatre, government ignorance stopped.



Figure 4. Halden centre. (photo: NSB, Oslo)

Between 1975-79 another intense debate developed about the two sea-warehouses on Lekterbrygga. The local government decided to tear them down. The second-hand building association wanted to restore the warehouses. Environmental minister, Gro Harlem Brundtland brought the case to national attention, where the warehouses were characterised as of great importance for national history. They were very valuable because there were very few left of this type of warehouse in Norway. So just before Christmas in 1978 the sea-warehouses were listed. This victory was a very important step for Halden, because this started demands for a proper plan for listed buildings in the town, and how they should be treasured.²³

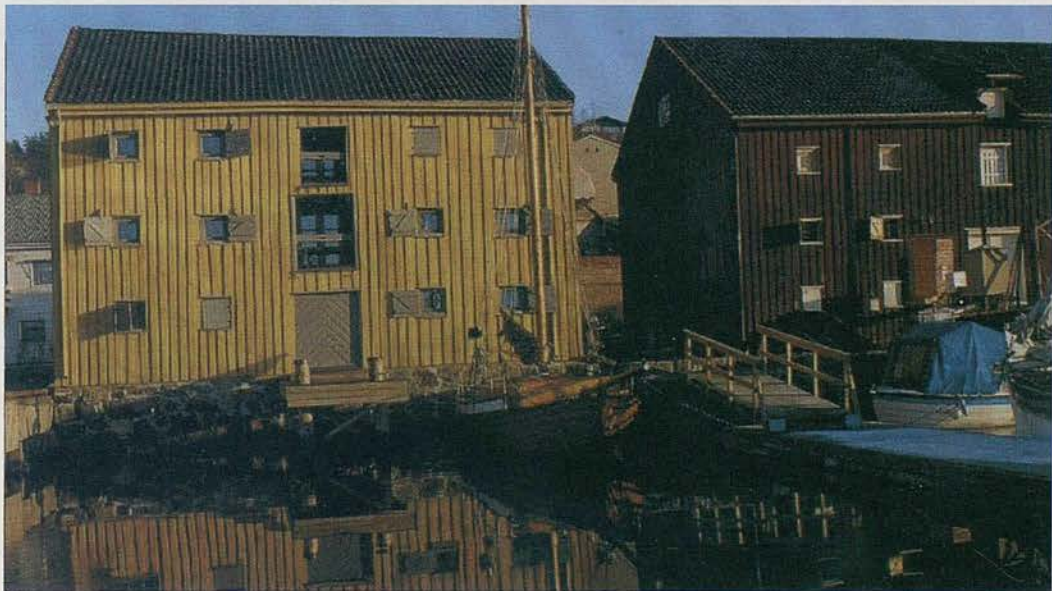


Figure 5. Protected sea-warehouses. (photo: Halden Turist guide 95)

²³ Document published by the Norwegian Government, Miljøverndepartementet, Stedsanalyse-eksempel Halden, 1993. The Department of the Environment has developed four documents as an instruction to town analysis, based mainly on the town's historical development. One document is analysing Halden.

From 1945 to the 80s, a great housing expansion was begun around the town. The areas close to the town centre were not well planned, and this created problems later. An organised team of town planners was needed. The local government developed a town planning team at the end of the 80s to produce a formal plan. The team's project was to analyse main themes, such as cultural heritage protection, nature protection, outdoor life, protection of agricultural environment and technical-economic conditions for developments.

The town planning has not yet been completed. Work already done has developed a temporary professional general valuation that gives the basis for: decisions for the town's green structure, an understanding of the town's structure and landscape, a future compressed development and town growth in a more harmonious way.

The work done has also raised consciousness regarding places in the landscape around Halden that have a special peculiar identity. An understanding of the whole of nature and landscape, as in the understanding of historical developments, gives an important basis for the understanding of the town's situation and opportunities for the future.

2.2.1. Medieval structure

The trading town of Halden was fortified during the Hannibal war 1544-45. A palisade with block houses and four town gates surrounded the town. The palisades were situated up the mountain east of the town, with three earth-works and a block house on the highest peak. The development of the fortress was temporary halted in 1672. It was far from finished, but in 1682-1701 work was restarted on the fortress. The oldest and most reliable maps of Halden, made in

1661, were made in connection with the development of the fortress. One of the maps is axono-metrically drawn and gives the impression of a compressed, disorganized timber-house structure with narrow streets.

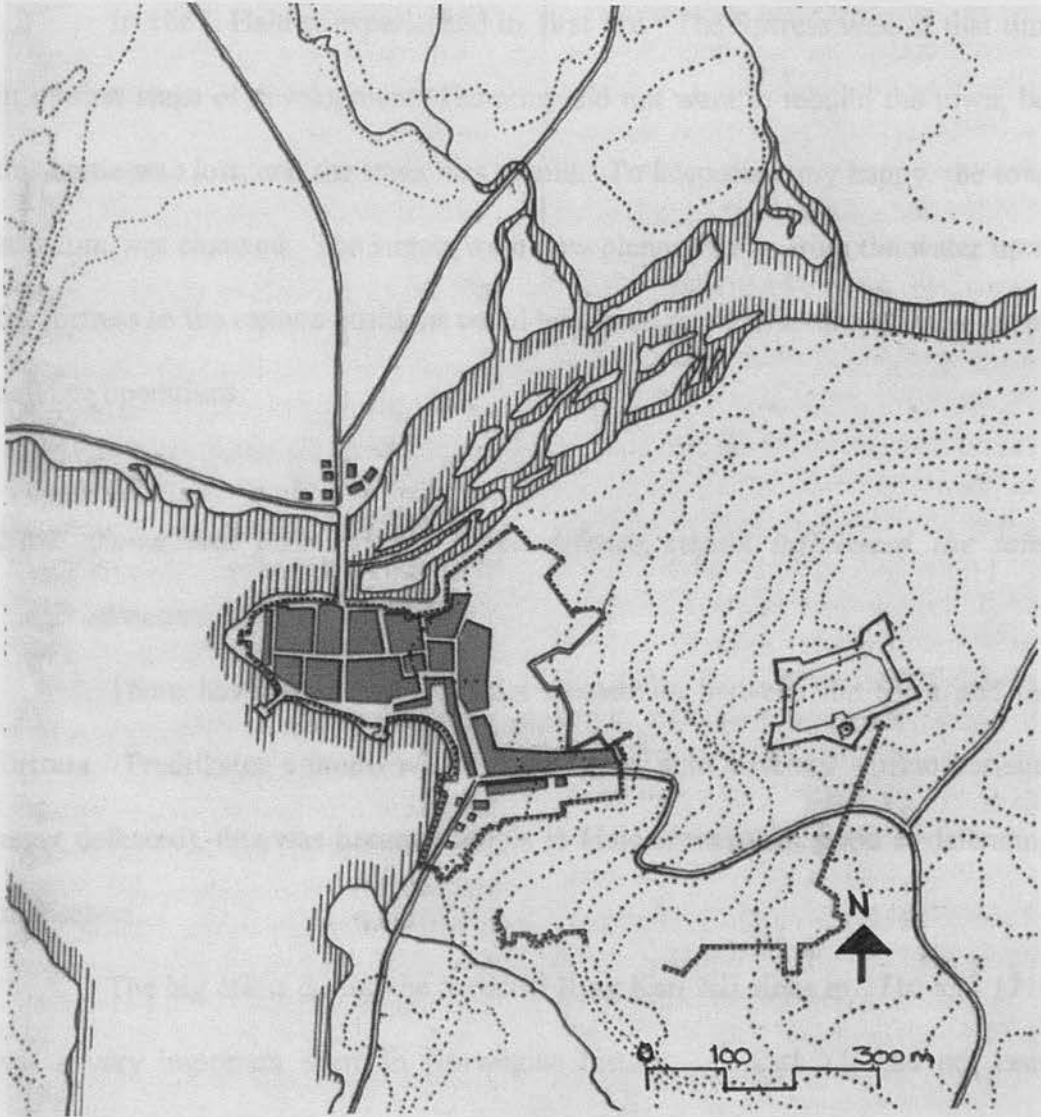


Figure 6. 1660 Natural growth in a medieval structure. (Illustration drawn by Halden kommune.)

The houses are concentrated inside the southern palisades at the mouth of the river. On the north side, where people had small town farms and gardens, the houses are more widely spread. The most important roads were also shown on the map. The map also shows the bridge that connects the north to the south. This

bridge was located in the same place until 1964. On the north side, it also shows the three main roads going in three different directions. One leads to Christiania (later called Oslo), one to Rakkestad and one to Armark. These roads are still important elements in the town's structure.

In 1667, Halden experienced its first fire. The fortress was, at that time in its first stage of development. The army did not want to rebuild the town, but this battle was lost, and the town was rebuilt. To keep the army happy, the town structure was changed. The streets were now planned to go from the water up to the fortress so the cannon positions could be placed more efficiently for the town's defence operations.

2.2.2. Town and fortress, where the defence system influenced the town structure

There has always been a great connection between the town and the fortress. Fredriksten's motto was "ofte beleires, aldri beseires" (often besiege, never defeated), this was because people in Halden was very good at defending themselves.

The big effort during the Swedish King Karl XII siege in 1716 and 1718 was a very important event in Norwegian history. If Karl XII had not been stopped in Halden, Norway's history would have been very different. Karl XII was killed on the fortress during the last siege in 1718.

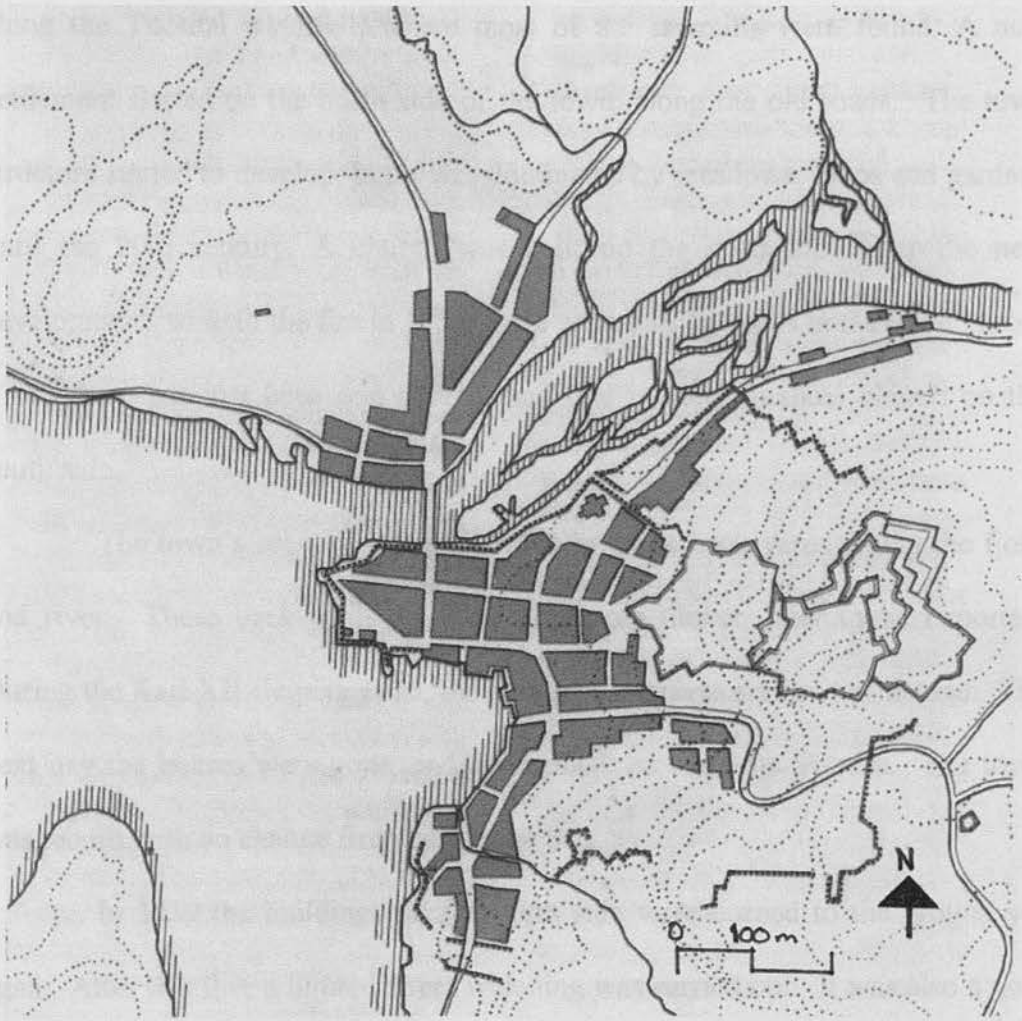


Figure 7. 1710 The military town below the fortress. (Illustration drawn by Halden kommune.)

The map above shows the town before Karl XII's first siege. At this time the fortress was completed. The town is unchanged, surrounded by block houses and palisades, and the structure is influenced by the regulation from 1667. The streets were made wider and have been stretched out to make it slightly star-shaped with directions to the batteries on the fortress. This form still exists today.

The north side belonged to the Os-estate until 1686, when Kristian V purchased this estate and gave it to the town. A large population was established

along the Tistedal waterfall, where most of the sawmills were found. A new settlement started on the north side of the town, along the old roads. The town structure started to develop, but it was dominated by meadows, loops and gardens until the 20th century. A church was built on the north side after the new development, so until the fire in 1759, there were two churches in the town. From 1759, there has just been one church, and that is the Immanuel church on the south side.

The town's scenery was dominated by large back-yards facing the fjord and river. These back-yards were used to store timber, later to be exported. During the Karl XII siege in 1716, the people themselves set fire to the town. The next day the houses were gone, and as planned, so were the Swedes. The town was rebuilt with no change from before the fire.

In 1759 the buildings on the north side were burned to the ground yet again. After this fire, a limited street widening was carried out. It was also a goal that the streets on the north side should face the batteries on the fortress but this was not possible. Only parts of two to three streets were facing the fortress. In 1817, a new fire broke out, but this fire did limited damage.

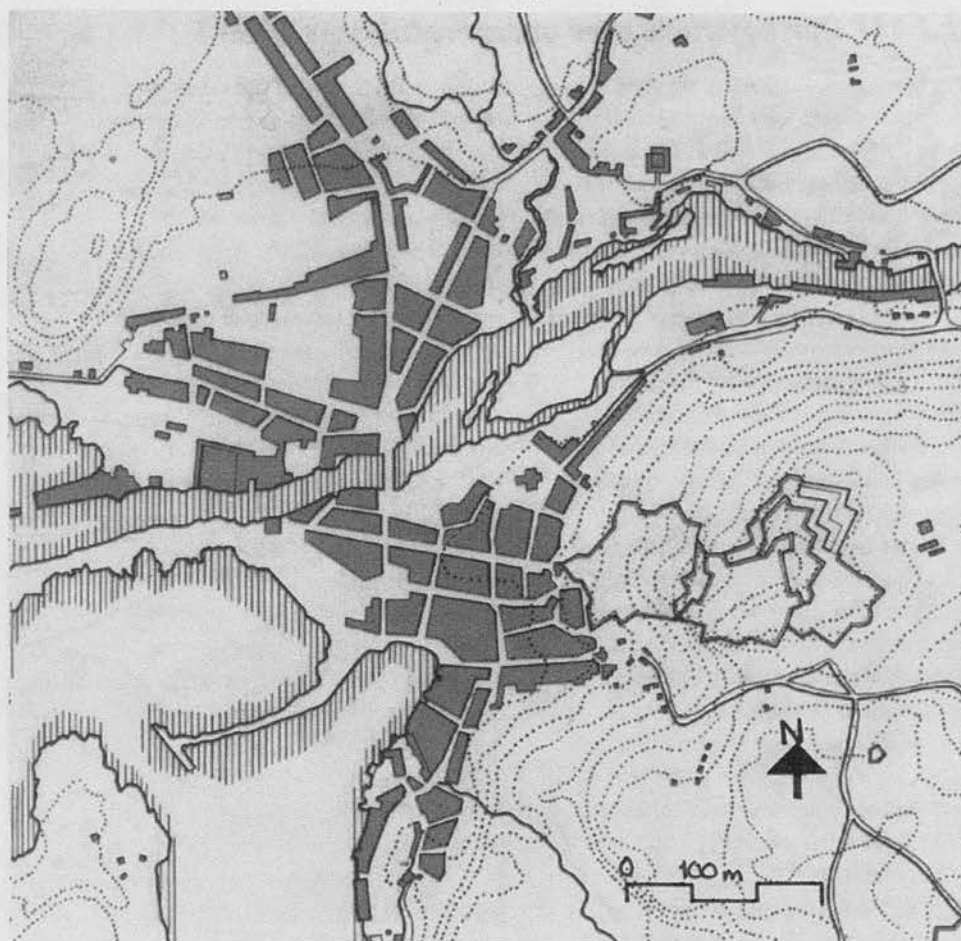


Figure 8. Plan of the town in 1840. (Illustration drawn by Halden kommune.)

2.2.3. Adjustment for vehicles

The Empire town's structure from 1826 was not changed before the 1950s. This structure worked well during this time, but when car traffic increased dramatically, the old road structure failed to operate properly and queuing became a problem. A new plan was made, as at the time it was important to make adjustments for cars. The first stage was to remove all steps from the pedestrian walks, trees and other physical barriers in the roads.

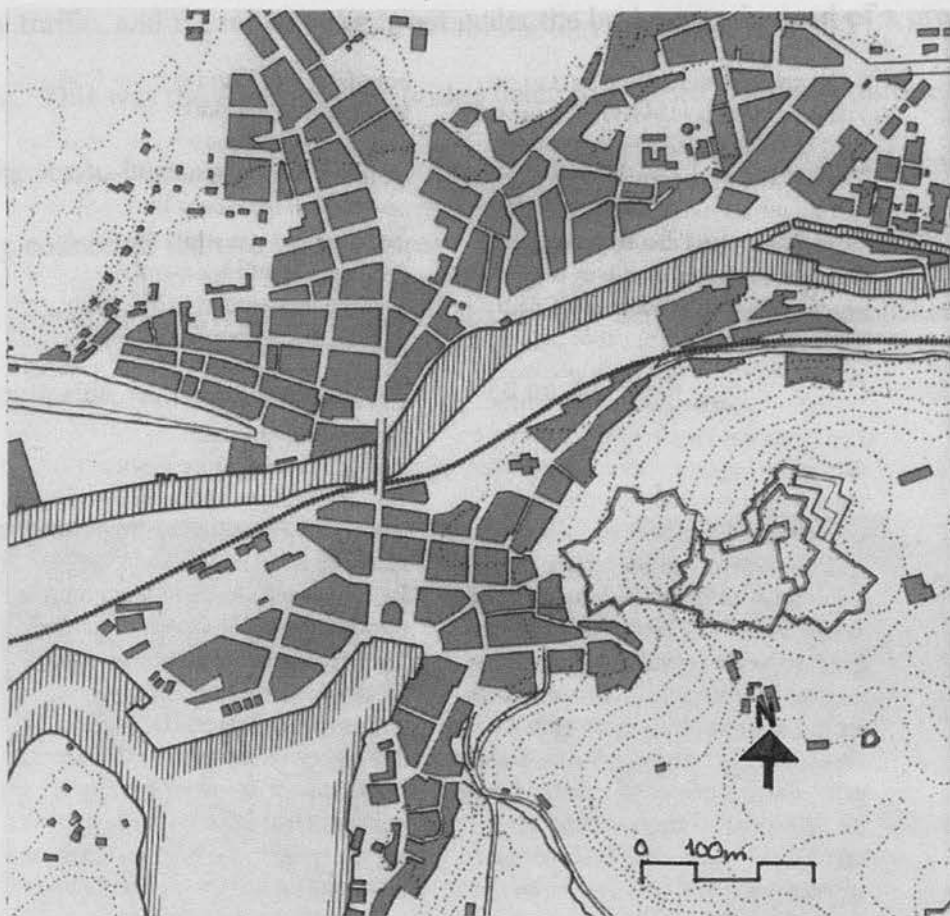


Figure 9. Plan of the town in 1930. (Illustration drawn by Halden kommune.)

The first regulation plan for this time shows that the streets were made wider, and more compact buildings were developed. The town gained some new buildings with “plain” street facades in this period. The next epoch, saw the first large master plan, this began in the early 60s. The road structure was changed to separate the different traffic groups. The use of areas was also changed. Housing, shops, offices, industry, free-areas and farming land was now separated clearly into different areas. The car increased mobility and made this development possible. The town boundary was too tight for a development like this, but in 1967 when Berg and Idd rural district united with Halden municipality, the problem was solved. The first big development of the new traffic system was the new town bridge that was finished in 1964. The old bridge was too small for the

heavy traffic, and the railway that went under the bridge was in need of a greater height. This was the reason for the bridge being torn down. This was unfortunate for the town, because this broke up the very tradition of the great axis that so nicely connected the two inner centres. The new connecting road was built, and this resulted in many buildings, part of the cultural heritage being demolished on the south side. A whole block was destroyed on the north side.

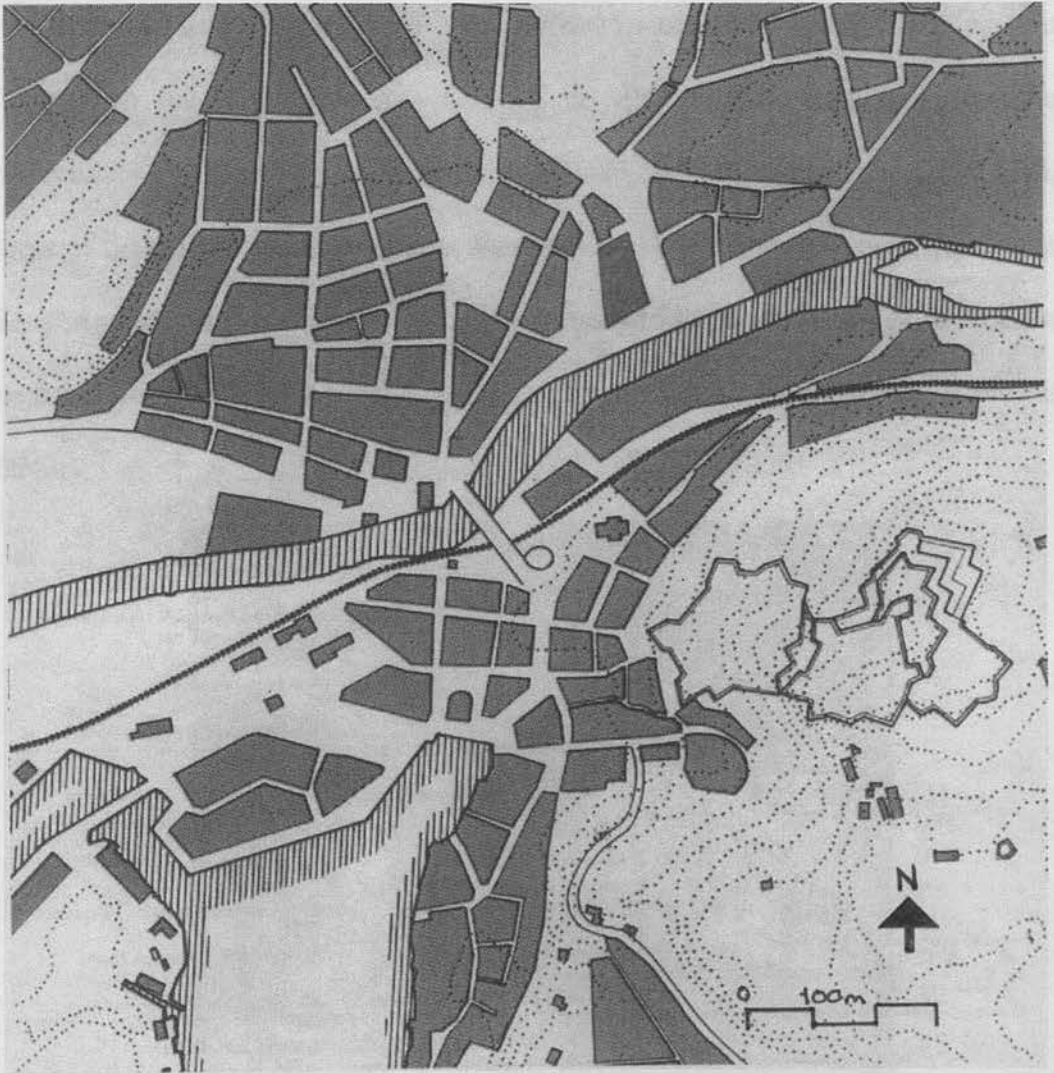


Figure 10. Plan of the town in 1964 (note the new bridge). (Illustration drawn by Halden kommune.)

The master plan from 1967 shows a four-lane main road structure that is connected to a four-lane inner town bypass around the old town centre. If this plan had been completed, the inner harbour had to be filled in. The old central road system was to be a pedestrian area except from some feeder roads to the bypass.

The plan has three central bridges over the river. The Norwegian Roadplan II for Halden from 1975 gives a more realistic solution for Halden's traffic system. This plan is, to some extent, in operation today. The eastern tangent on the north side was finished in 1980. That gave the town the opportunity to close the old main street to vehicles. With this new main road, most of the town's traffic problems were solved. When the new paper factory at Saugbrugs was finished in 1993, it was necessary to build a new bridge to create a better eastern route. This was because of the new heavy traffic to and from the factory.

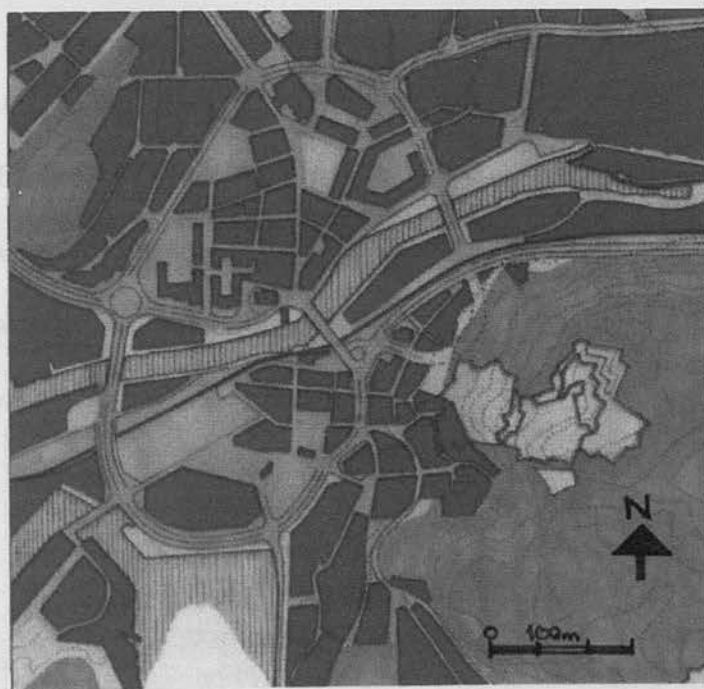


Figure 11. The master plan from 1967 (note the four-lane road as a circle around the inner centre). (Illustration from "stedsanalyseksempelet Halden", Miljøverndepartementet.)

A new bridge on the eastern tangent will soon be built. This will complete the period for the Norwegian Road plan II in Halden. The town bridge development and the completion of the Norwegian Road plan II, destroyed important roads in the town's structure. The 80s were spent on attempts at covering the "open wounds" that had been created by the axis changing directions. Town repairs, preservation and restoration projects have also characterised progress to the present time. The great industrial project superseded other developments to make it accessible for transportation of goods and parking spaces to the customer. Industry that needs large open spaces close to the main roads, is now commonly located outside the town centre, on the harbour area, or industrial areas.

The town has undergone a "renaissance". Smaller businesses, service functions, cultural buildings and offices are also an important town centre function. The old factory along Os alle' was rebuilt as a schools, research and office area.²⁴

The future plan is to develop a new high speed rail line between Oslo and Gothenburg. The railway is planned to go straight through Halden's inner centre. When this railway is built, it will yet again create a great transformation and new opportunities will arise. The road structure must change, because the 1964 town bridge will have to be torn down. This will be discussed at a later stage.

²⁴ The reference is from an article by the Norwegian Review of Architecture, Byggekunst, "Hvorfor Halden" (pp.469-487) *Halden- et byportrett* (Vol 8) 1991. For more extensive treatments on the subject, see another article in the same magazine, "Byer finner sin form", (pp. 460-462)

2.2.4. Nature and landscape

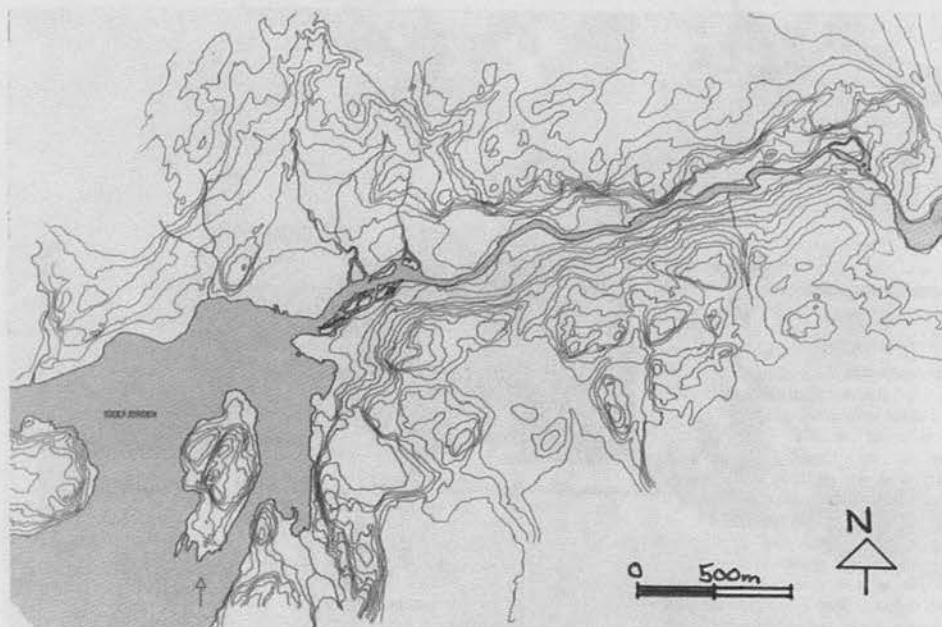


Figure 12. The landscape of Halden. (Illustration drawn by Halden kommune.)

The method used as the foundation for the landscape analysis, registration and estimates, is an adapted map to the scale of 1:10000. The adaptation consists of lines and details that describe the landscape's main form, such as: "the floor" and "walls in landscape rooms", "plateaus", and "transition zones". From local information, the emphasis is on the connection between the landscape formation and its geological quality, like mountains, bottom of the sea and moraines. By using this method, it is possible to find the connection between the landscape formation, the foundation of the nature, the historical footprint and today's use of landscape for production and recreation.

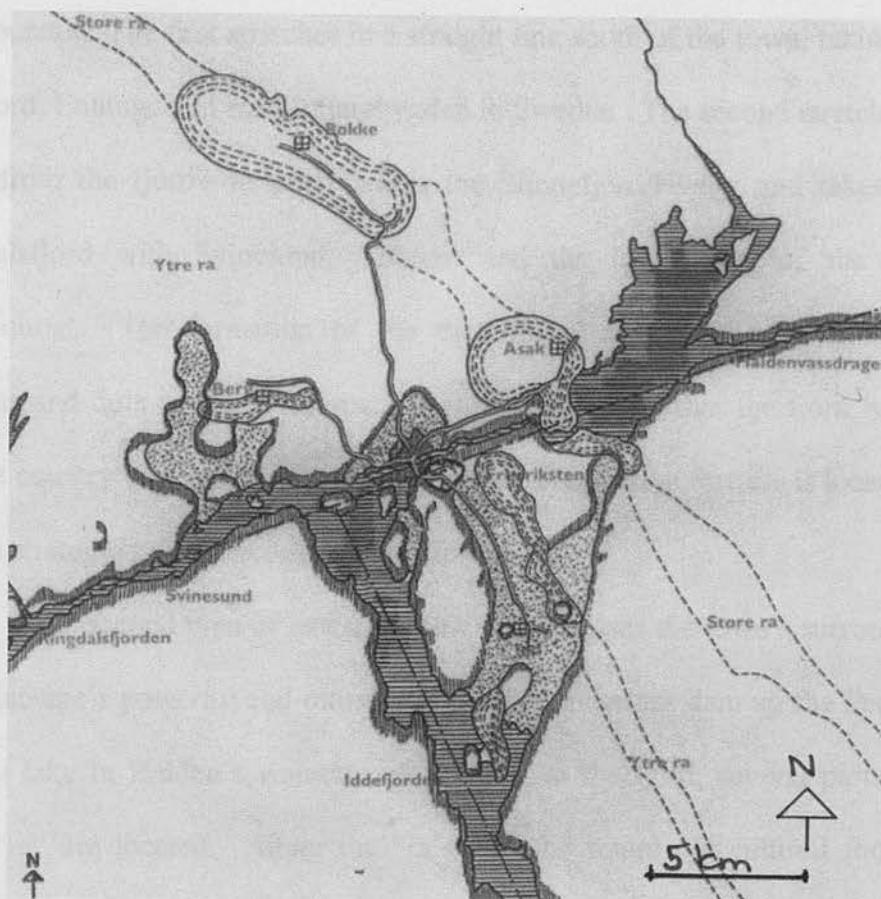


Figure 13. Halden's geology and form. (Map 1:10 000, Illustration from "stedsanalyse eksempel Halden", Miljøverndepartementet.)

This adopted map-basis is first used for the registration of single objects or cultural inheritance, listed buildings or constructions, walks and "green corridors", streams and especially tree groups or ponds. Finally, an entire valuation is made where larger areas are defined as continuous cultural landscape, important landscape scenery or an agrarian core.

2.3. Geology and landscape's form

The description of the landscape formation and registration of the subjects mentioned above, provides a basis to look at the difference between town and landscape. Halden is located in a cross between two large geological plates in

the mountain. The first stretches in a straight line south of the town, taking in the Iddefjord, Enningdalen and Bullarebygden in Sweden. The second stretches east-west, from the fjord's mouth towards the Singlefjord/Hvaler and takes in the Ringdalsfjord with Svinesund, Tistedal and the lower part of the Halden watercourse. The formation of the mountains, create indicated boundaries, plateaus and dots in the landscape. This in such a way that the fjord has been made a country border and the mountain where Fredriksten fortress is located, is a natural strategic point for control and defence.

The second type of landscape that characterises the town's surroundings, is the ice-age's powerful end-moraine "ra". The moraines dam up the Femsjøen, the last lake in Halden's watercourse. Closer to the fjord, several parts of the outer "ra" are located. Along the "ra's" can be found old cultural footprints. They were the first natural living spaces, farming lands, traffic routes and graveyards. Even today, this powerful "ra" area around the town is a central place for different settlements.

The third main type of landscape around the town is the old sea bottom. The sediment on the bottom of the sea has been left as marked flat floors in the landscape where the walls are created of mountain and moraines. The heavy mud earth was later transformed in to the rich farmland we know today.²⁵

2.3.1. Protection value

The registration and valuation of the subjects mentioned above, is the first reference carried out on three theme maps for the protection of nature and outdoor life, cultural inheritance and agriculture. Then a technical-economic

²⁵ The reference is from an article in the Norwegian Review of Architecture by Halden's head of development Tor Granum, Byggekunst, "Halden-byen og landskapet" (pp.481) Halden- et byportrett, (Vol 8) 1991.

valuation is made of the development's potential, with an estimate of short and long-term need for land. So it is possible to make a complete valuation. The complete valuation is then presented on the same type of map as the theme-map.

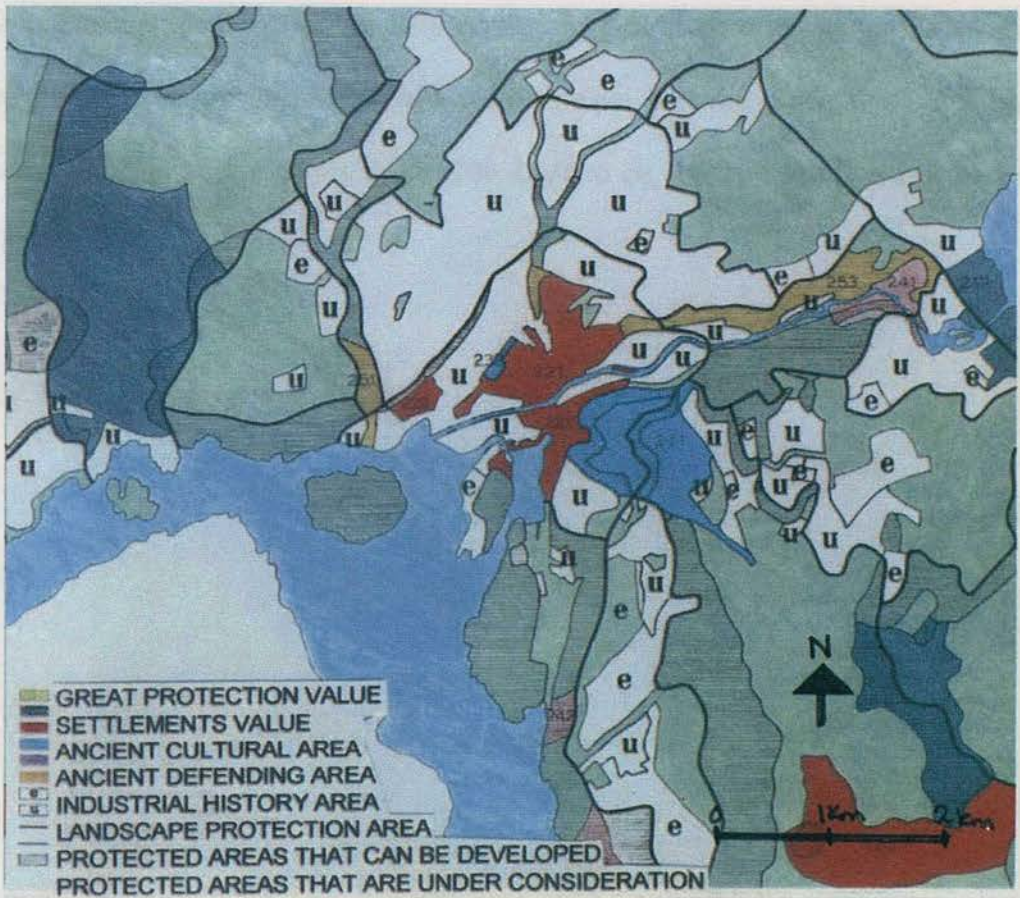


Figure 14. Protection value map. (Illustration from "Stedsanalyse eksempel Halden", Miljøverndepartementet.)

2.4. The architecture in Halden

2.4.1. Analysis of historical buildings

Knowledge of the building's history is a necessary supplement to be able to understand the historical development of the building's organisation. This is an important issue for the creation of a protection plan. In the 1980s, this knowledge was an absolutely necessary method in itself to be able to complete a protection plan.

2.4.2. 18th century architecture

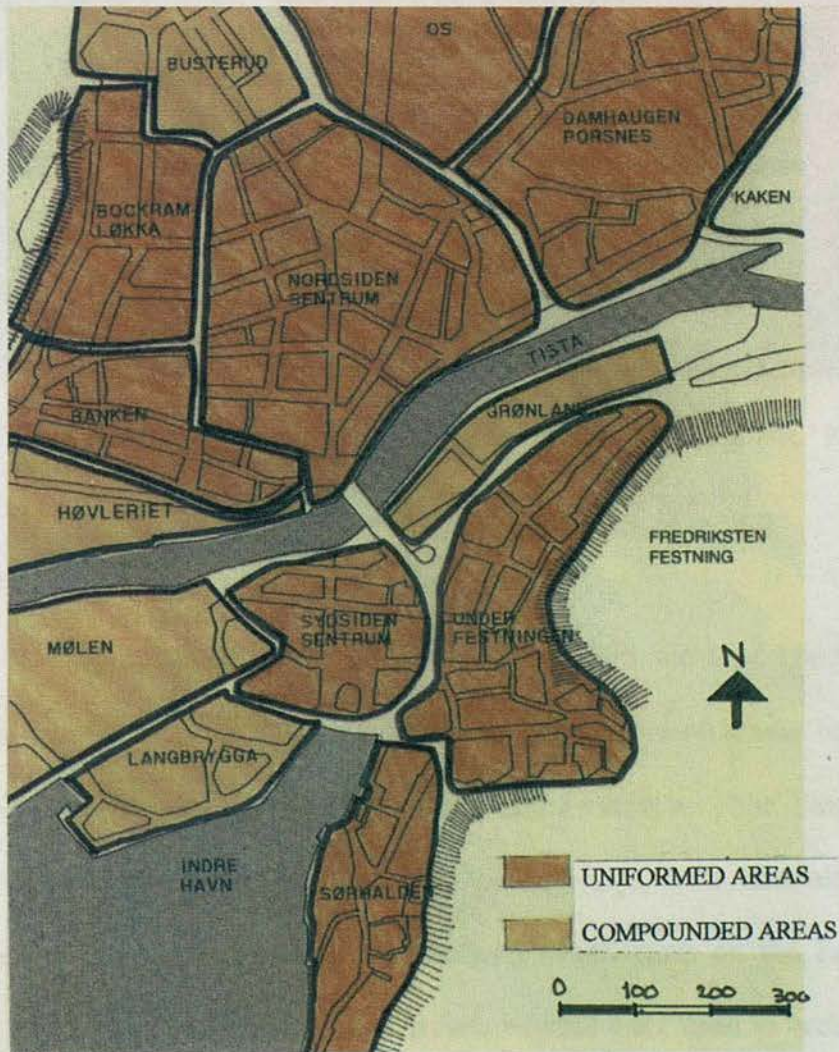


Figure 15. Map locating the uniformed and the compounded areas.

Between 1667-1826, Halden was struck by six great fires. Most of the 18th century architecture in the town centre was destroyed. There are only some 18th century buildings left on Banken, west of Oskarsgate. Few of them have the original facade and decorations, but the Empire, Swiss and the Functionalism style have made their appearance. Some few examples of the original 18th century style are found on the Brockramgården, Spinneriboden at the fish market and to some extent on the “Konservativen”.



Figure 16. Banken area. (Photo from the Halden tourist guide, '95).

2.4.3. The Empire age

The town fire in 1817 and 1826 resulted in most of Halden being redeveloped in only a few years. This is when the Empire style was introduced. Classical elements supersede baroque and rococo subjects. The Empire style acquired local variations, adopted from the local building skills, naturally enough influenced by the strict and abstinent military architecture on the Fredriksten fortress. As you might expect, the fortress's experts were used as architects for

the larger developments in the town. Two engineering officers, F.G. Gedde and B.N. Garben, were frequently used in the Empire age.

C.H. Grosch, who trained at the architect school in Copenhagen, was the man given the responsibility to develop the “Fredrikshald”. When the town was rebuilt after the 1826 fire, it was Grosch who received the commission to design the largest building projects. He brought several “impulses” from Copenhagen that inspired the “military” architects. It is also possible that it was Grosch who called for the German bricklayers in the rebuilding process. This is how new craftsmanship was added. The most significant buildings Grosch designed are the Immanuel church, Søylegården, the town hall and the Lathinschool.

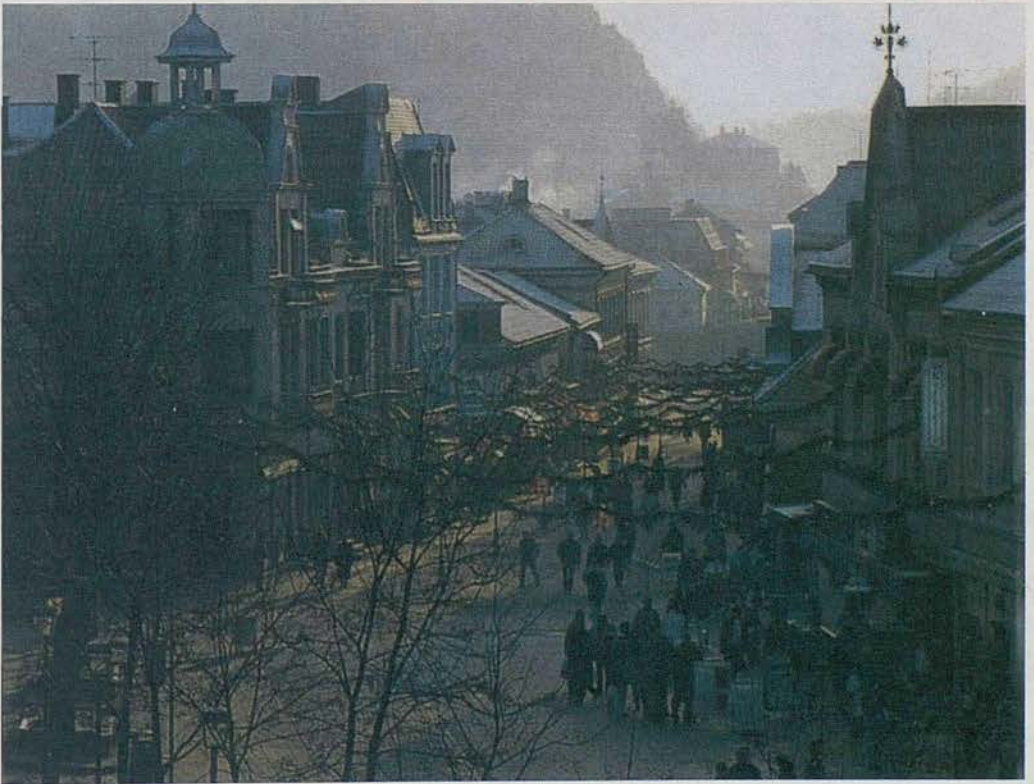


Figure 17. Halden the Empire town. (photo: Stedsanalyse eksempel Halden.)

Gedde's main work is the Kongegården and Fayegården, both are barely changed externally today. Garben design Tungegården, Dietzgården and the Fredrikshald theatre. Tungegården was later rebuilt.

The great architect-designed developments have influenced and inspired creators of the anonymous architecture found in domestic housing. The style and craftsmanship details were copied and used on domestic houses. This developed the local Empire style.



Figure 18. Grosch's most significant buildings, Immanuel church and Søylegården. (photo: Halden og Armark Tourist guide 2001.)

2.4.4. Historicism and Swiss style

The Empire style is the predominant style through to the end of the 19th century, especially in the anonymous architecture. In the great buildings in the town, from the end of the 19th century, is it common to find details from the gothic and the renaissance styles. This architecture is often called "the historicism". Examples of this style are the old police station and Arbeidsamfunnet (the workers' community building). Another direction in the brick architecture is characterised with the stereotype. The facade is detailed with decorations around windows and doors, the cornice and the storey line decorations

were influences from Germany. Examples of this are the Saugbrugsforeningen's office building and the new town hall.



Figure 19. The town hall and Saugbrugsforeningen's office building.

In timber houses, the Swiss style dominates this period. This has a connection with the importation of a new technique in the mill business from Germany, where the timber was utilized more economically. The importation of the new steam-saw introduced the prospect of great precision. The style is recognised by the decorated details. The style is also recognised by the use of large pitched roofs. The ends of the beams are visible and decorated. This type of building is taller and more airy, compared with the Empire style. The roof is shaped like an umbrella above the building. One good example of this style is Ynglingen in the Øvre Bankegate. The Damhaugen area is also strongly marked by the Swiss architecture.

Halden was the first town in Norway to have this style. The two oldest examples of this style are the block of flats on Stumberg and the Braadlands building on the fortress.



Figure 20. Ynglingen.

2.4.5. Art Nouveau and Neo Empire

The Art Nouveau style relives the “historicism” in large developments in this period. Art Nouveau represents a complete new direction of design. “Backe-Toresen gården” in Kirkegata 6 is one example. “Juelgården” Storgata 15 is another typical building of this style. Both were designed by Albert Wille.

Figure 21. Two examples of the Art Nouveau and Neo Empire style. (The building from left to right is Backe-Toresen gård and Juelgården.)

2.4.6. Functionalism

Functionalism became very popular around 1930 in Halden. This style was a remarkable break from the earlier styles. The idea of this style was to create an external appearance that would give the impression of what is happening



Figure 21. Bache & Thoresen-gården.

After 1910, it again became fashionable to adopt styles from earlier epochs. Buildings were created with a very steep type of pitched roof. The housing area around Bockramløkka and Os are marked by this style.

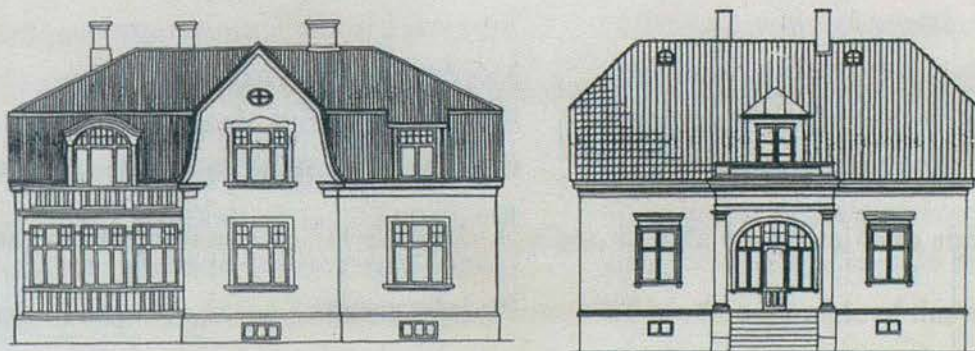


Figure 22. Two examples of the Art Nouveau and Neo Empire style. (Illustration from stedsanalyse eksempel Halden.)

2.4.6. Functionalism

Functionalism became very popular around 1930 in Halden. This style was a remarkable break from the earlier styles. The idea of this style was to create an external appearance that would give the impression of what is happening

inside. The layout of this type of house had to be very well planned for its function. The idea was to let "shapes follow function". According to the Functionalist style, the facade was shaped by the plan.



Figure 23. The Telegrafgården and a typical Functionalist building.

New building materials were introduced for this style, like reinforced concrete, steel and large areas of glass. The early type of this style was recognised by smooth walls with no decorations, straight horizontal lines and flat roofs. Telegraphgården in Blokkhusgata from 1937 is a fine example of this early functionalism. Jernbanegata 4, Mette Mengsgate 5, 7 and 9 are other examples from this epoch. The housing area on Friedheimjordet is yet another example of this style.²⁶

Knowledge of the building's history and style is a necessary supplement to be able to understand the development of the town as a whole. This knowledge

²⁶ The different styles are discussed in both Miljøverndepartementet, Stedsanalyse-eksempel Halden, 1993 and the Sentrumplanutvalget, "Bygningshistorisk oversikt", Sentrumplan, Halden kommune, June 1982

is also important for all future developments, especially since this building is a part of a protection plan for the town.

2.5. Place analysis development

The place analysis that was developed between 1979-81 was confined to the historical inner centre as it was represented in 1910. At the same time, an area classification of the town was also developed.²⁷ The problem in 1980 was to define uniform town areas. The intention was to analyse this to be able to save and repair the most interesting historical town areas. Areas that were divided as compounded areas were also a topical important subject in the place analysis. Areas for future redevelopments were affected only to some extent. These areas are of high priority today.

²⁷ The plan was developed by a selected group from the local planning office, for more information see: Miljøverndepartementet, Stedsanalyse-eksempel Halden, 1993



Figure 24. Map illustrating different zones of classifications of developments.
(Illustration from Sentrums plan, Halden kommune.)

2.5.1. Sørhalden (south Halden)

This area is confined by the beach line and the mountain. Sørhalden is located on a long, narrow triangular beach surface, with two holms like Huitfeldtholmen and Peterborg. The town portal and the town's palisade was once located at Peterborg. The beach line, the mountain and the old main road through the area are the most important elements in the structure. The development structure is built along the old main road like Shippergata, Strandgata and Gamle Sørhaugen.



Figure 25. *Sørhalden. (Illustration from Tourist guide 2001, Halden og Armark.)*

Sørhalden was an area for businessmen and people connected to navigation, boats and shipbuilding. Three shipbuilding yards were located here about 1850. Around 1900, two large shoe factories and one packing factory were developed. The most important building style is timber house structures on narrow, deep sites between the main road and the mountain. Between the main road and the harbour line, the building form is different. Here, it is a mixture of houses, old sea stores and old industrial buildings made of brick.

2.5.2. Below the fortress

This area is defined as being located from the foot of the fortress mountain and up to the fortress wall. This area is organised around the old main road up Storkleva (the fortress street) towards Sweden and out through Elvegata

north-east towards Tistedalen.²⁸ The area has been growing towards the boundary of the fortress. The area was populated with craftsmen, businessmen and workmen. Most buildings were mainly of timber and are still in very good condition. Elvegata, unfortunately, is congested heavily with traffic.

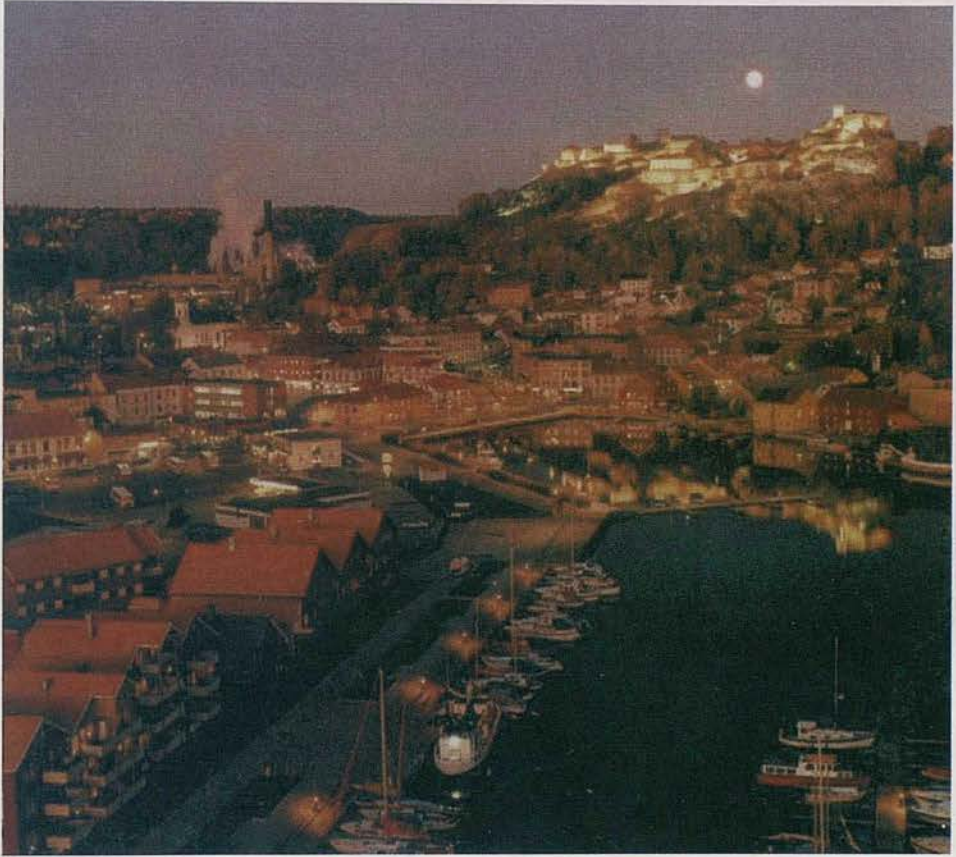


Figure 26. Below the fortress and the south side. (Photo: Ervik.)

2.5.3. Sydsiden. (The south side)

The south side of the inner centre has a regulated block pattern around the main street Torggata and the market. The main road that now is called Storgata has become a boundary between the south centre and the east area. This main road was built as a four-lane vehicle road in 1964. The area contains shops,

²⁸ For location of street names see Appendix 2, The map is from the local town guide 95.

offices and some housing. It is a mixed area, but the development built in the 19th century made of masonry is the most dominant.

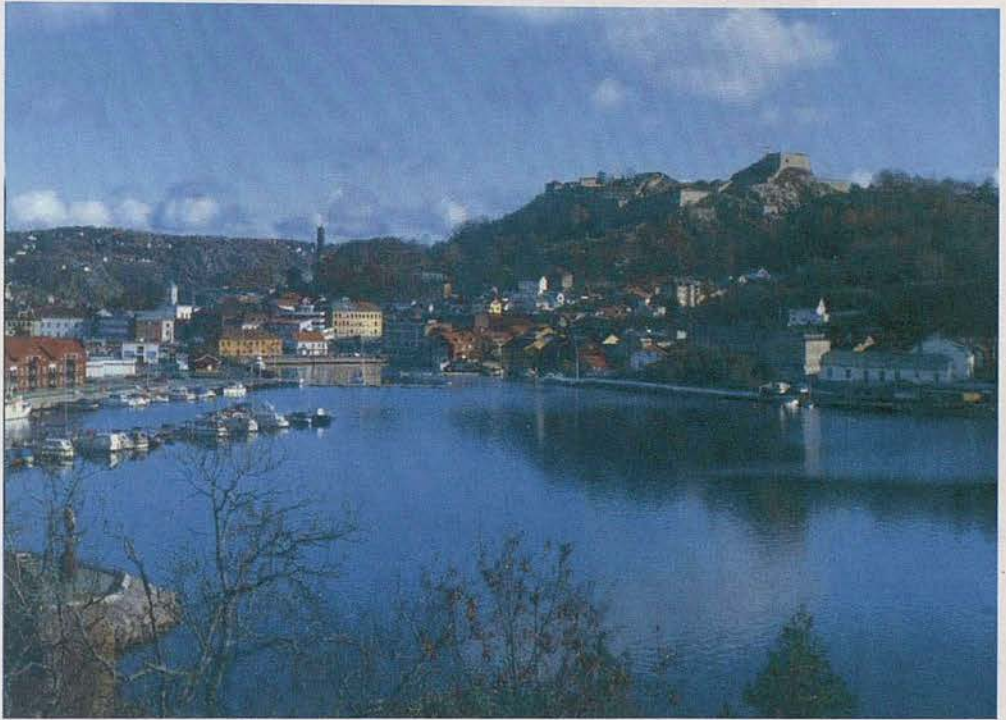


Figure 27. The south side. (photo: Jørn Böhmer Olsen).

2.5.4. Banken

Three long streets that took their shape from the river side, makes the main structure of this area. This area has small, low timber buildings. In 1980, many of these buildings were demolished, but new houses were developed in the same style. Banken is a housing area with some craftsmen operating and with shops at the east part. This area was not damaged by the fires of 1817 and 1826, and it is the only uninterrupted urban neighbourhood in Halden with roots going back to the 18th century.



Figure 28. *Banken.* (photo: Halden guide 95).

2.5.5. *Brockramløkka*

This area has a block structure and is characterised by the town garden ideal and has mainly a detached housing style from 1910-30.



Figure 29. *Brockramløkka.*

2.5.6. *Inner centre, north side*

The area is developed around the old main road Storgata and Svenskegata. Along these streets and Violgata were developed a compact building structure with two and three-storey high masonry buildings from 1880-

1910. This area contains mainly shops, offices, cultural institutions and some housing.



Figure 30. Inner centre.

2.5.7. Damhaugen- Porsnes

Two old roads create the area's main structure. The structure in the 1880s is supplemented with a grid road system. This area was mainly developed with timber housing in the 1880s, and was home to workmen and craftsmen. The craftsmen also had their workshops here. The old hospital was located in the centre of this area. Now this area is occupied by one of the town's high schools. This area features many fine examples of houses in the Swiss style. Several buildings were created in the 1870s and 1880s to provide housing for the steadily increasing population of industrial workers. The Saugbrugsforeningen's big mill is also located here. Damhaugen is the largest working-class neighbourhood in the county of Østfold where most of the houses remain in their original style.



Figure 31. Damhaugen.

2.5.8. Langbrygga

Langbrygga is a harbour area that was filled-in in the 18th century. Storage rooms, cow-houses and slaughter-houses were located here, but were closed down or moved. The bus station was built here in 1960 and is still there. This place is now developed as a housing and private boat area.

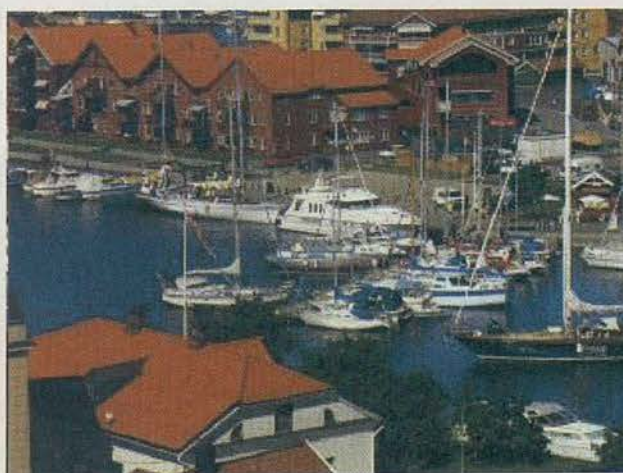


Figure 32. Langbrygga. (photo: tourist guide 95)

2.5.9. Mølen

Mølen is located on reclaimed land. This was done by using the waste from the timber factory. This area was mainly used as a harbour area and for the storage of timber. The harbour operation is to some extent shut down and the timber storage function has ceased.

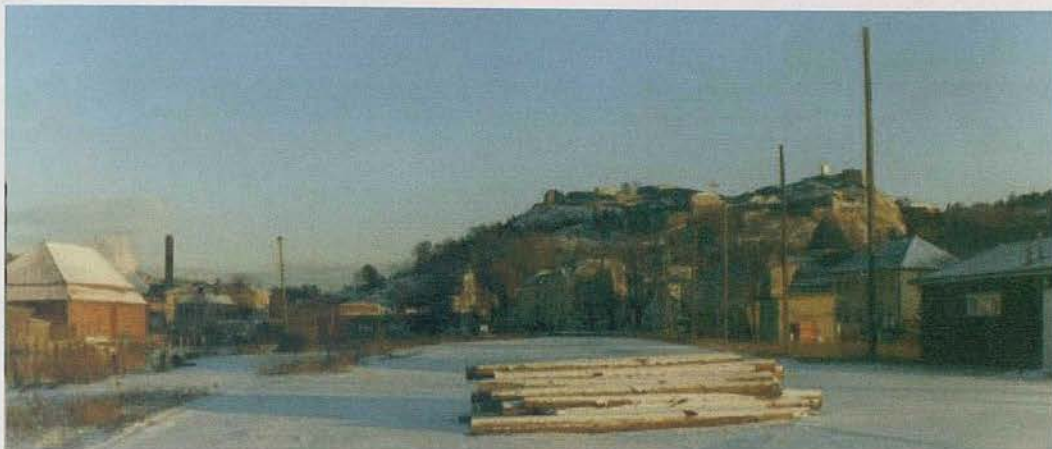


Figure 33. Mølen.

2.5.10. Høvleriet

The timber factory Saugbrugsforeningen's planing mill operation and timber storage is closed down. A transformation process has started here. The planing mill buildings have been redeveloped to be shops.



Figure 34. Høvleriet. (photo: Tourist guide 2001, Halden og Armark).

2.5.11. Busterud

Busterud is located along the old main road through the town. It is a housing area with some shops. The area is mixed, with newer developed blocks and older timber houses. The blocks are the dominant feature, and the area is still under transformation.



Figure 35. Busterud.

2.5.12. Grønland

This area is located on some islands along the river Tista. Today this area is filled-in and the islands are connected to the mainland. Old industrial buildings from 1940-60 are located here. These buildings are to some extent empty today.

This area is ripe for transformation. Development of a new road system and the new railway will contribute to this transformation.²⁹

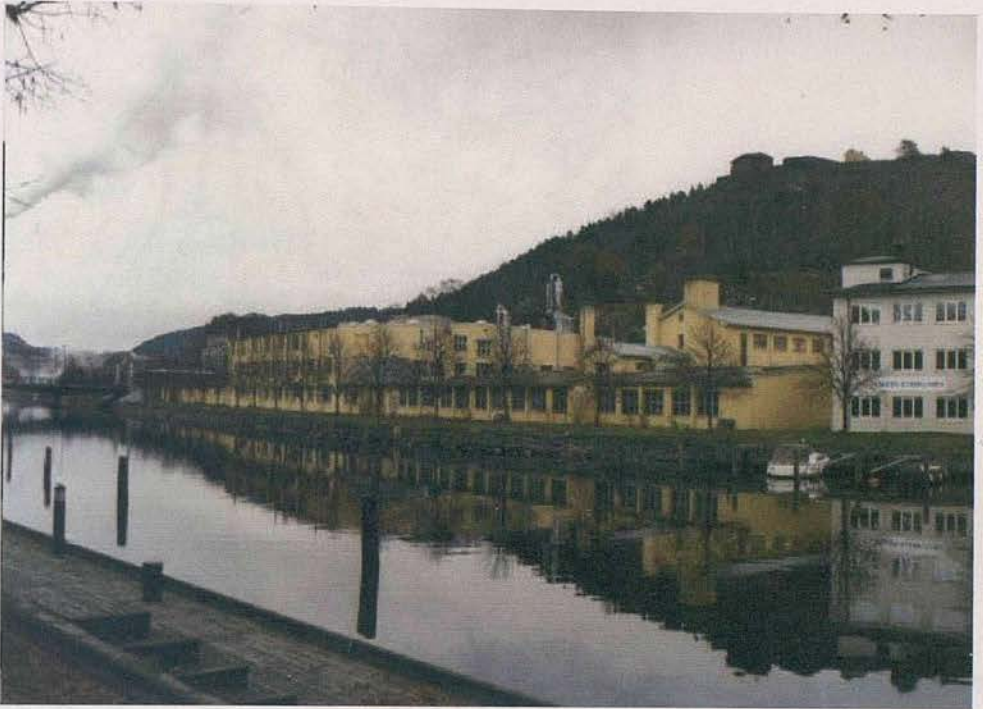


Figure 36. Grønlad.

2.6. Existing situation and an introduction to the problems

Today Halden is characterised by optimism and a great belief in its future. This is related to great industrial plans and a new paper factory. The improvement of the river, the harbour area, tourism, a generous choice of education options and the creation of a more people-friendly environment in the town, are other factors contributing to this optimism.³⁰

Halden's authorities have already done a lot to create a more people-friendly environment. Historical areas and buildings are being preserved.

²⁹ The different areas are discussed in both Miljøverndepartementet, Stedsanalyse-eksempel Halden, 1993 and the Sentrumplanutvalget, "Bygningshistorisk oversikt", Sentrumplan, Halden kommune, June 1982

³⁰ Document published by the Norwegian Government, Miljøverndepartementet, "Stedsanalyse" Stedsanalyse-eksempel Halden, 1993 (p.3)

Protection maps have been made to encourage a strategic plan for listed buildings.

Protection maps have also been made for both town and landscape.³¹

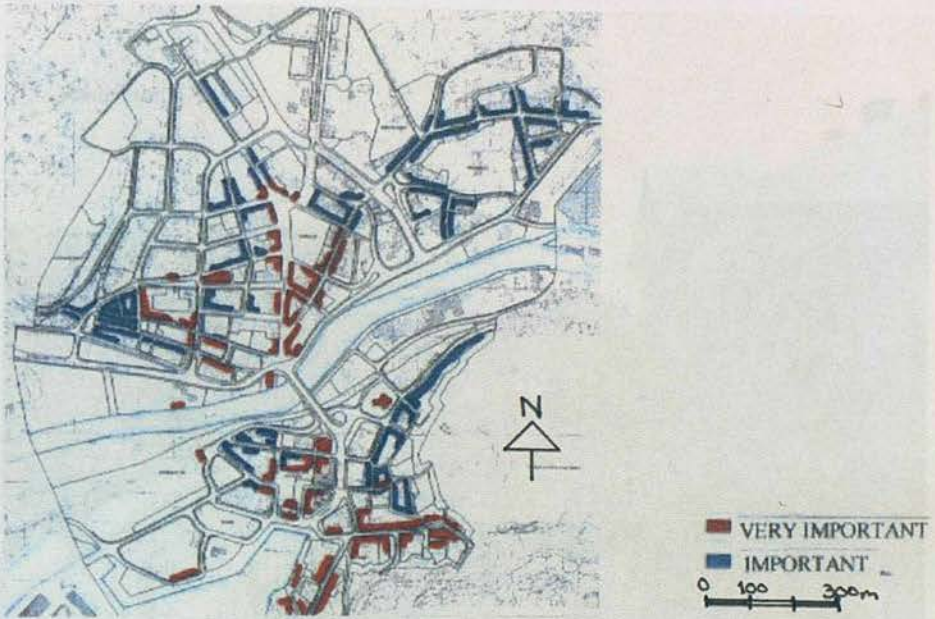


Figure 37. The protection map. (Illustration: Sentrumsplanutvalget, Halden kommune)

As noted earlier, Halden has two inner centres: one on the north side and one on the south side divided by the river Tista.

On the north side, the main street has changed from a street with heavy traffic to a pedestrianised area.³² The street is characterised by shops, offices, institutions, and outdoor activities. This street is called Storgata and is the most marked axis on the north side. There is also an inner centre on the south side. It was the first settlement started in the town. Since there was more space for further development on the north side, this became the largest and busiest inner centre. The south side inner centre is used less compared to the north, but is absolutely as exiting and pleasant as the north, probably even more interesting.

³¹ Greater detail regarding the protection plan can be found by the local government (planning office), in the document, Sentrumsplan Halden kommune, Sentrumsplanutvalget, June 1982 (pp.37-38)

³² Storgata was closed for traffic in 1981 and a pedestrian walk was developed. The asphalt was removed and the old cobbles restored to create a more people-friendly atmosphere.

This is because the south side contains the market, the harbours, the fortress, many interesting buildings and all transport interchanges.



Figure 38. The old town bridge. (photo: C. Andersen, Halden før og nå)

The separation between the north and south side has not always been like this. The transformation happened during the 1960s, when the streets in the town could not cope with the increasing number of vehicles. Before the '60s, the town had one main axis in the inner centre, namely Storgata. This axis stretched from the town park on the north side, to the harbour area on the south side, as one straight line. During this period, the town was characterised as having just one inner centre. Before 1964, it was a low profiled bridge, connecting the two ends of the town's strong axis. It was considerably easier to walk from the north to the south side during this period.

The whole area changed in the '60s. The old bridge was demolished, and a new four-lane bridge was developed. Today, the bridge symbolises what went wrong thirty years ago. The low profiled, well-integrated bridge was replaced by

a curving, over-sized limb. As Ulf Grønvold described it; "A result of an unsuccessful transplant operation".³³

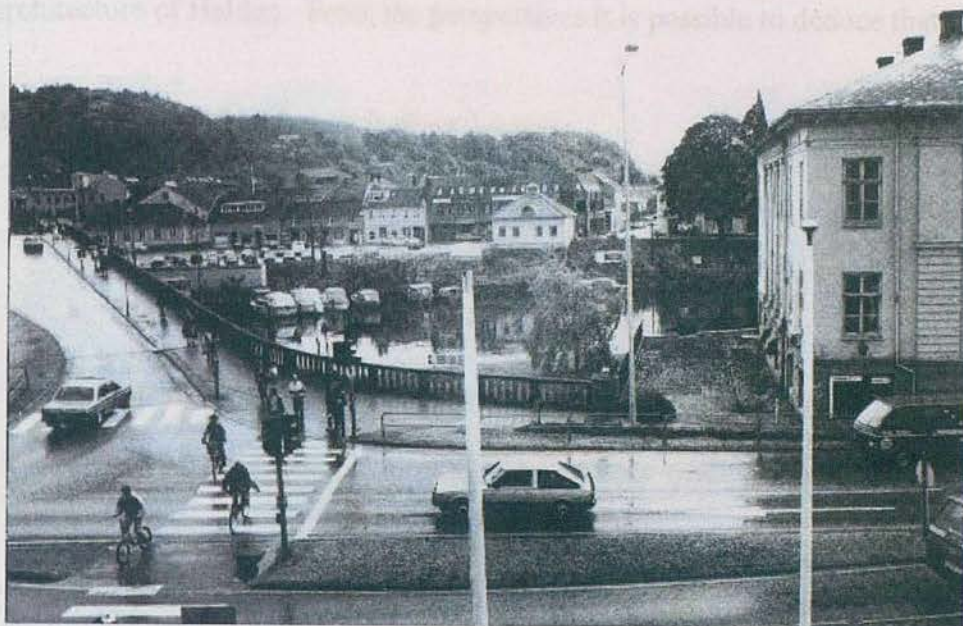


Figure 39. The bridge built in 1964. (photo: Halden før og nå)

The new town bridge and the road system, adapted to the new vehicular system in town, changed the inner centre completely, and the town was never the same again. This is now the town's greatest need for change.

The change in the '60s was developed to make a more car-friendly town, but the town has changed since then. The vehicle problem is still recognised, but the inner centre and continued creation of a more people-friendly environment is even more important today.

To clarify the magnitude of change needed for the town's inner centre, a list of problems has to be discussed.³⁴

³³ Norsk Arkitekturforlag, Byggekunst, "Wiels plass i slutten av september", an article by Ulf Grønvold, *Halden et byportrett*, 8/1991. (p. 470)

³⁴ The author developed a sound research of the town for the Diploma work in 1994-95. The topic "need for change" was discussed with the local government in autumn 1995 and a list was made.

2.7. The pressure for change

This chapter has described the geology, landscape, history and architecture of Halden. From the perspectives it is possible to deduce that:

2.7.1. *The need for change is there because:*

- Two separated inner centres do not work well in a small town like Halden.
- The town has poor links between the different spaces.
- Attractive spaces are completely deserted.
- Some spaces are recognised to be of poor quality and not up to today's needs.
- The town suffers the need for more green areas.
- Some existing spaces limit the town's opportunity for expansion.
- The usage of spaces today is too seasonal.
- The main pedestrian walk has a poor link to the south side.

Conclusion

The chapter discovered that Halden is a town with 26,000 inhabitants and covers an area of 640 km². The town is a typical industrial town with the paper factory as the most important industry. In addition to that, the town has about 70-80 small and medium-large companies. The researcher also found that Halden is a town with numerous attractions and the greatest of these is the Fredriksten fortress, the defence installation begun in 1661 and which is one of Norway's largest buildings. The town has a close and concentrated structure, where many of the central buildings are in the strong "military" Empire style. The concentrated structure and its clear identity, is clarified by its placement in a

dramatic fjord and valley landscape. Halden is a town that has experienced several town fires and the structure has changed to some extent, every time it was rebuilt. In the '60s a plan of a more modern car-friendly town was developed, and many old areas were pulled down. That started an intense debate in the '70s around the historical buildings in the inner centre. New plans in 1974 involved a greater change that resulted in new structural elements and the removal of the established town structure and buildings. The local government developed a town planning team at the end of the '80s to produce a formal plan. The team's project was to analyse main themes, such as: cultural heritage protection, nature protection, outdoor life, protection of the agricultural environment and technical-economic conditions for developments.

The town planning has not yet been completed. The work already done has developed a temporary professional general valuation that gives the basis for: decisions for the town's green structure, an understanding of the town's structure and landscape, a future compressed development, and town growth in a more harmonious way.

A place analysis was developed in 1979-81. At the same time, an area classification of the town was also developed. The problem in 1980 was to define uniformed town areas. The intention was to analyse this to be able to save and repair the most interesting historical town areas. Areas that were divided as compounded areas were also a topical subject of importance in the place analysis. Areas for future redevelopments were affected only to some extent. These areas are of high priority today.

Halden has been through several phases and transformations in the past. Today a new change is taking place in Halden. The foundation for the decision is

a plan for the new high-speed train link, which will run straight through the town's inner centre. The new high-speed train will travel between Oslo in Norway and Gothenburg in Sweden. The idea is to decrease the travelling time between the two cities. The railway was planned to be finished before 2001, but a more realistic deadline is 2007.³⁵

The planning process for the realigned railway is active in both Oslo and Halden. Since the new railway is interrupted by the town bridge that was built in 1964, major transformation will occur in the town. This will also create opportunities to change what went wrong in the '60s. Halden planning office's greatest concern is mainly how this new railway will affect the town and the town's scenery. It is very important that no historical buildings are disturbed, and that valuable land is not destroyed.

This will bring, to a great extent, a radical change to the town, and the opportunity for change would be both beneficial and welcome. To clarify the number of opportunities for change, a list of different events has to be discussed.³⁶

Opportunity for change is there because:

- A new railway system is planned for the town's inner centre.
- A new road system is planned for the inner centre.
- A new pedestrian walkway is under development.
- A new transport interchange centre is planned on the south side.
- New spaces are planned to be developed in the inner centre.
- A shopping centre of 15000 m² is planned along the riverside on the north side.

³⁵ An article written by Torgeir Nakken in the local newspaper, Halden Arbeiderblad, NSB- sjefen velger sydsiden, 11 Jan. 1996 (p. 5)

³⁶ The list "opportunity for change" was developed after several interviews and meetings with the Head of Development and Town planning, Tor Granum.

- Another shopping centre is planned on the north side, north-east of the Kristian V Square.
- New developments of the town's education system are planned.
- New developments of the town's industry.
- A new hotel is planned to be developed around the inner harbour area.

PART TWO THEORY

CHAPTER 3 THEORETICAL APPROACHES AND METHODOLOGY

3.1. Introduction

Place analysis provides a theoretical framework for design that can be very useful for helping us better understand the design issues. This theoretical approach drives such activities to understand the design process and how it can be improved.

The researcher found that a place analysis was developed in 1979-81 that confined to the historical inner centre as it was represented in 1910. The problem in 1980 was to define uniformed town areas. The intention was to analyse this to be able to save and repair the most interesting historical areas. Areas that were divided as compounded areas were also a topical subject of importance in the place analysis. The researcher found it important to create a separate place analysis of the town's places, especially after the problems that occurred in the '60s when a plan of the more "modern car-friendly" town structure was developed.

At this stage, it was important for the for researcher to use the place analysis as a part of the research to be able to test the hypothesis: "A people-friendly town is not just a collection of people-friendly places but a linked network of these so integrated into a coherent whole that the overall settlement can readily be perceived and effectively planned". At the same time, it will contribute to answers concerning the research question:

- How is integration achieved in the context of the whole town?
- What are the indicators of overall quality in the context of public places in Halden?

The place analysis undertaken for this research is described in Chapter 4, to evaluate the places in the past, in Chapter 5, to evaluate the places today, and in Chapter 7, to evaluate the places in the future.

3.2. Place analysis

Many towns have burned down several times and on each occasion, as a result, the town has changed to some extent. Buildings have burned down or been demolished, and new buildings have been developed. Road systems have changed or been transformed, some have been closed and others reopened. During all these changes, the same spaces that were created in the past are still there today. Some have changed, even becoming unrecognisable but they are still there. To be able to understand the present situation of Halden's places, a place analysis had to be undertaken. In this case, the thesis found that the place analysis was useful in:

- Defining edges to clarify the area and the volume of a place. To distinguish one space from another and separate "here" from "there".
- Defining every access in a place to clarify its accessibility, if its following a natural path and if its provide a preview of the place.
- Defining listed buildings to clarify the location and its value to the place.

- Defining pedestrian areas to clarify the natural path to the place and how the path is organised to link other places.

“The place” has always survived, throughout the various upheavals. This is a testament to its great importance as a key feature of daily life. It is called modernising and many of the places have been drawn into this process more successfully than others. The place is often referred to as the heart of the city. The inner centre is for the vibrancy of life, an assembly place for everyone, either we want to negotiate or sell something, or ramble about and have a look, talk or meet people. Another option is just to rush through or be there to feel the pulse of life, sitting on a bench in the park or by the water fountain.¹ Places in many towns meet one’s requirements to allow people to gather and to establish contact, but it is important to notice that the inner centre contain several small and large “hearts” with very different functions. This is the reason we cannot solve the whole environmental problem just by making the park and the market nice and popular, but we have to make the inner centre work as a whole.

If we take a closer look between the buildings, we will find many places that have their own specific function. It is important, therefore that all places are treated and protected on the same terms as the park and the market.

Jan Gehl said in his book *Life between Buildings, Using Public Space*:

“An ordinary day on an ordinary street. Pedestrians pass on the sidewalks, children play near the doors, people sit on benches and steps, the

¹ The book, *Life Between Buildings*, 1987 by Jan Gehl. For more information, see particularly the chapter, “Three Types of Outdoor Activities” (pp.11-16)

postman makes his rounds with the mail, two passers-by greet on the sidewalk, two mechanics repair a car, groups engage in conversation. This mix of outdoor activities is influenced by a number of conditions. Physical environment is one of the factors: a factor that influences the activities to a varying degree and in many different ways. Greatly simplified, outdoor activities in public spaces can be divided into three categories, each of which places very different demands on the physical environment: necessary activities, optional activities and social activities. Necessary activities include those that are more or less compulsory, going to school or to work, shopping, waiting for a bus or a person, running errands, distributing mail - in other words, all activities in which those involved are to a greater or lesser degree required to participate. Optional activities - that is, those pursuits that are participated in if there is a wish to do so and if time and place make it possible - are quite another matter. This category includes such activities as taking a walk to get a breath of fresh air, standing around enjoying life, or sitting and sunbathing. These activities take place only when exterior conditions are optimal, when weather and place invite them. This relationship is particularly important in connection with physical planning because most of the recreational activities that are especially pleasant to pursue outdoors are found precisely in this category of activities. These activities are especially dependent on exterior physical conditions. Social activities are all activities that depend on the presence of others in public space. Social activities include children at play, greetings and conversations, communal activities of various kinds, and finally - as the most widespread social activity - passive contacts, that is, simply seeing and hearing other people.²

² Gehl Jan, "Three Types of Outdoor Activities", Life Between Buildings, Using Public Space, 1987 (pp.11-14). For a review of more literature on the subject, see also the classic book, Cooper-Hewitt

This researcher found that Jan Gehl's theory on outdoor life, was very useful in the place research in Halden. The theory was important to have in mind during the place analysis, and as an addition to the observation research; this to be able to know "what to look for" during the observation research, as a part of using the senses.

3.2.1. Places in towns today

It has always been easy to identify mistakes made in the past. It is altogether more difficult to prescribe better ways of approaching the problem of making urban areas more user-friendly. It is the writer's view that public spaces are, without a doubt, the most important part of our towns and cities. It is where most human contact and interaction take place. It is the part of the urban area to which the public have physical and visual access. A place is more important and matters more than individual buildings or vehicular traffic. We must not forget that an attractive public place is very important to a feeling of well-being or comfort. It is probably fair to say that traditionally, building craftsmanship was not just about buildings, but also spaces. This should still be the case. Today we are witnessing a return to the spirit of living in towns and cities that is characterised with well-loved traditions. The object has now become the public realm, the space between buildings rather than the buildings themselves.³ This is

Museum, the Smithsonian Institution's National Museum of Design, *Urban Open Spaces*, 1979. On the subject "public space", a great number of references are available. To mention a few, see: Marcus Clare Cooper and Francis Carolyn, *People Places, Design Guidelines for Urban Open Spaces*, 1990. Crouch Dora Polk, *The Historical Development of Urban Open Space*, 1981.

³ Greater detail regarding this subject can be found in Jan Gehl's book, *Life Between Buildings, Using Public Space*, 1987.

the central theory of this thesis with Halden providing a rethink to test the ideas of Gehl and others, and to shed light on their perspectives.

3.3. Questionnaire theory and design

3.3.1. Introduction

A questionnaire is a method of obtaining specific information about a defined problem so that the data, after analysis and interpretation, result in a better appreciation of the problem. It is an important element of the total research design, and its preparation demands considerable professional expertise.

The general form of questionnaire lies between two extremes. At one end of the continuum lies a highly structured questionnaire, consisting of a series of formal questions designed to attract answers of limited response. At the other extreme, is the unstructured questionnaire, where formal questions are replaced by a freer style of investigation.

In practice, surveys frequently mix the style of questioning. However the questionnaire is formed, individual questions must be designed to attract respondents to give valid and reliable information about the subject of the enquiry, and to do this with the minimum distortion or bias.

Clearly, this cannot be done without a thorough background knowledge of the subject.⁴

⁴ Peter M. Chisnall, "Questionnaire" in Marketing Research, (4th Edn) 1992 (p.109).

3.3.2. *The importance of the questionnaire*

The questionnaire is an important element of the total research design. At its best, it is a remarkably versatile method of gathering information about a wide variety of topics. Used with care and understanding, it can provide valuable data, which otherwise, would not be available.⁵ Although much progress has been made, designing questionnaires is still an art and not a science. Much of the progress has been in the form of admonitions, such as “avoid leading questions” or “avoid ambiguous questions”. It is much easier to embrace the admonitions than it is to develop questions that are indeed not leading or ambiguous.

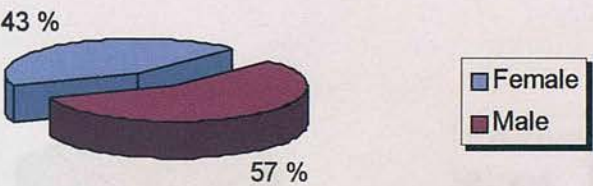
A guide and a checklist can be very useful in the process of designing a questionnaire.

- | | |
|---------|---|
| Step 1: | Specify what information will be sought. |
| Step 2: | Determine type of questionnaire and method of administration. |
| Step 3: | Determine content of individual questions. |
| Step 4: | Determine form of response to each question. |
| Step 5: | Determine wording of each question. |
| Step 6: | Determine sequence of questions. |
| Step 7: | Determine physical characteristics of questionnaire. |
| Step 8: | Re-examine steps 1-7 and revise if necessary. |
| Step 9: | Pre-test questionnaire and revise if necessary. |

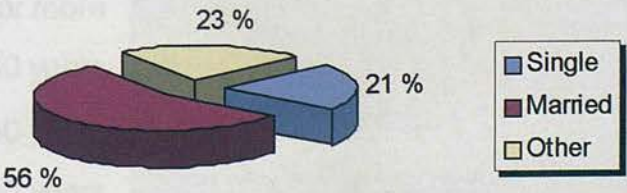
⁵ For a discussion of the different alternatives concerning a questionnaire, see: Chisnall Peter M, “Questionnaires”, Marketing Research, 1992 (pp. 109-135)

Both the descriptive and causal research demand sufficient prior knowledge to allow the framing of some specific hypotheses for investigation, which then guide the research. The hypotheses also guide the questionnaire.⁶ To gather background information, a questionnaire was designed and organised as follows:

Question 1. Sex:

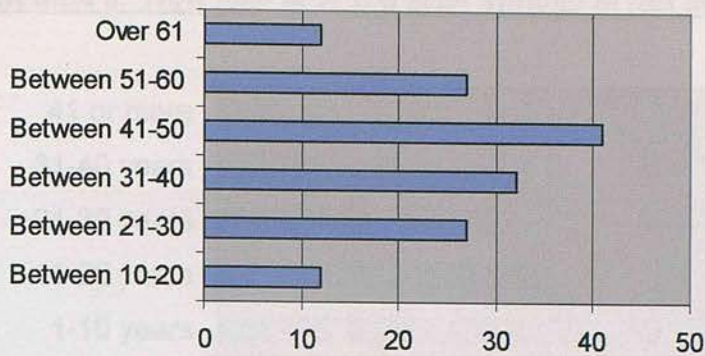


Question 2. Marital status:

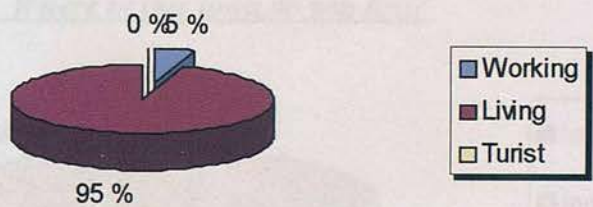


Question 3. How old are you?

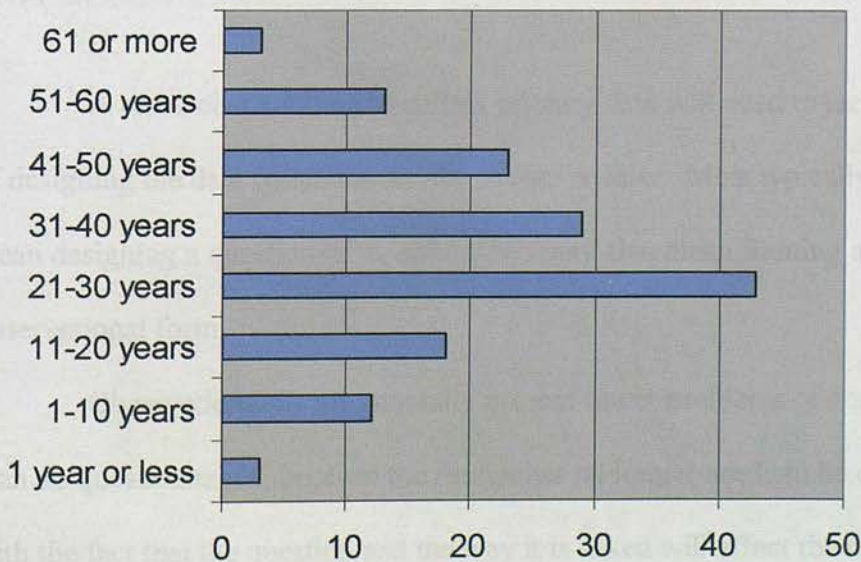
⁶ Gilbert A. Churchill Jr. "Data collection forms", in Marketing Research, (4th Edn) 1987 (pp, 271-272).



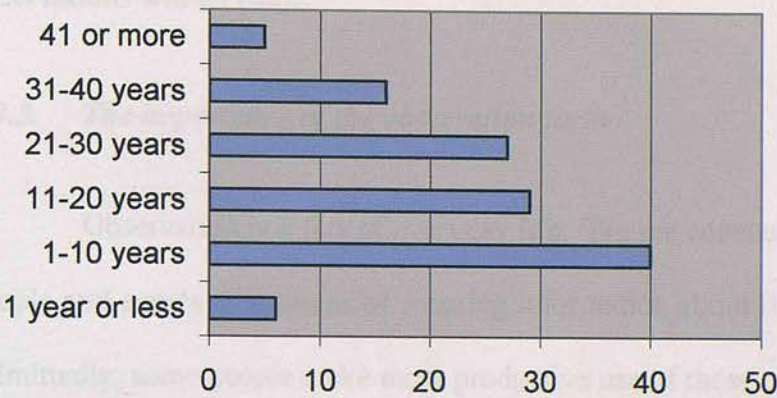
Question 4. What are you doing in this town?



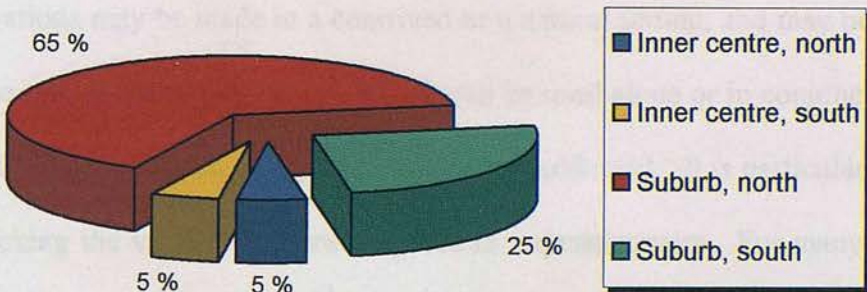
Question 5. How long have you been staying in this town?



Question 6. How long have you been working in this town?



Question 7. Where in this town do you live?



A researcher wishing to collect primary data will need to tackle the task of designing the data collection device sooner or later. Most typically, this will mean designing a questionnaire, although it may also mean framing an observational form.

Observational forms generally present fewer problems of construction than do questionnaires, because the researcher no longer needs to be concerned with the fact that the question and the way it is asked will affect the response.

Observation forms do, however, require a precise statement of who or what is to

be observed, that actions or characteristics are relevant, and when and where the observations will be made.⁷

3.3.3. *The importance of the observation form*

Observation is a fact of everyday life. We are constantly observing other people and events as a means of securing information about the world around us. Admittedly, some people make more productive use of those observations than do other.

Observation offers the researcher a number of possible approaches. Like communication methods, those are either disguised or undisguised. Further, the observations may be made in a contrived or a natural setting, and may be secured by a human or mechanical observer.⁸ It can be used alone or in conjunction with other forms of research to supplement the data collected. It is particularly useful in checking the validity of answers given in a questionnaire. For many reasons, people may not give completely accurate accounts of their actual behaviour. Because what they say they do, or where they do it may not necessarily coincide with the answers given to an interviewer.⁹ The technique used for the observation, the author chose the “post occupancy evaluation and redesign of urban places” method.¹⁰ The method is utilised by sensing and feeling the space. Sensing is defined as experiencing through our senses; in this case, that will be by sight, hearing, smell and feeling the space. The senses are essentially frontally oriented, and one of the best developed and most useful senses is the sense of sight. To be able to evaluate the existing open space to see how it functions for

⁷ Gilbert A. Churchill Jr. “Data collection forms”, in Marketing Research, (4th Edn) 1987 (p. 309).

⁸ Churchill Gilbert A. Jr., “Data collection: Primary Data”, Marketing Research, Methodological Foundations, 1987 (p. 258)

⁹ Chisnall Peter M, “General Introduction”, Marketing Research, 1992 (p. 32)

the user and feeling the space, the observer should be in the different areas during different days.¹¹

3.4. Space syntax theory

3.4.1. Introduction

Space syntax originated in the early seventies in an effort to understand why, from a spatial point of view, buildings and built environments were as they were, and occupied only a small corner of the theoretically vast field of architectural and urban possibility. From the earliest days, it was focused on the study of real cases, and their effort could be contrasted with the parallel efforts of others such as Marh and Steadman at Cambridge (and then at the Open University) to identify the formal and geometric limits of architectural possibility. Some studied possibility, others studied actuality, and it was compared notes in the friendly rivalry of a mobile joint seminar, which soon expanded to include others. The earliest space syntax work took real environments, such as organic settlements, and vernacular buildings, and tried to identify the formal, spatial and functional forces that generated their characteristic spatial forms. The earliest uses of the term space syntax in the mid-seventies, described this type of work.

The role of architectural theory can be simply expressed: it is to make the non-discursive discursive, usually by seeking to express the relational nature of space or form in buildings in some consistent system of concepts and terms linked by some kind of logic. The techniques called “space syntax” are exactly this, aimed at one of the main dimensions of architectural non-discursivity: space.

¹⁰ This method was developed by Professor Clare Cooper-Markus, see also Methodology, page 5.

¹¹ The result of the observation is shown in tables 3.3.5. It is one table for each place throughout this chapter.

Space syntax is a means to study architectural and urban phenomena directly and through this, hopefully, to identify the non-discursive relational schemes that structure their characteristic forms.¹²

Space syntax techniques and its growing knowledge base and theory are now being increasingly used in design, in particular, on a large number of major projects. It is unusual for architectural research to be so directly applied in this way, and it is important to understand why. At some level, of course, there is a simple reason: space syntax techniques can simply be turned round and used in design as easily as they can in research. They are tools to think with and experiment with, as well as tools of analysis.

Design is a matter going from what we know, to what we do not know. Techniques, "on their own," cannot accomplish this. Only theory can. Indeed, the usefulness of theories is exactly that they allow us to proceed from the known to the possible. Architecture is about the exploration of possibility and so are space syntax techniques.¹³

Space syntax is a representation of spatial system in settlements and buildings. Architects and urban planners are sculptors of spaces and it is important that they have the tools with which to analyse and predict what is and what will be a good space. A good space, according to the creators of space syntax, is one which firstly is used, and therefore, there is a likelihood of encountering other people. Secondly, is one which has a "global" relation to the rest of the urban development or building. That is to say, those other parts are

¹² Space syntax laboratory, "Space syntax, first international symposium", A brief history of an idea, 1997 (p.11).

¹³ The arguments are adopted from the Abstract Brochure by Hillier, Bill and Hanson, Julienne, "The Reasoning Art: or, the need for an analytical theory of architecture", Space Syntax, First International Symposium, 1997.

accessible from the space being analysed. At a local level, a space may be successful if it is quiet, has pedestrian walkways, has local facilities and has a sense of place. Its success at a global level will depend on its integration with the rest of the town. Space syntax is a method of analysing settlements and their structure. A great deal can be understood by considering space structure in two different ways:

- as a two-dimensional or convex structure
- as a one-dimensional or axial structure.

The convex organisation of the system describes the degree to which a space extends in two dimensions. The definition of this convex space is that it has all its two dimensional boundaries directly visible from all other points in the space. A map of the town can be created by dividing it into the fewest and largest convex spaces. The axial or one-dimensional structure describes the degree to which any space can be extended linearly. An axial map will be the set of longest and fewest straight lines that go through all convex spaces and make all axial links.

A convex space is the most localised space, because it extends only so far as it is consistent with every point being visible and directly accessible to every other point. An axial line, on the other hand, is the most globalised since it extends as long as there is at least one point visible and directly accessible. A convex space describes where one is in the system, whereas axial lines give information about where one might be going. Axiality adds relationships to those created locally and inserts a space into the overall structure of spatial order and movement within a town. Axiality therefore, seems closely associated with

patterns of movement and vistas. Convexity on the other hand, seems less associated with movement than with a sense of space.¹⁴

3.4.2. Integrating cores

Because the system is different from other parts, it is possible to use integration values to reveal the overall structure of the system. These configurational pictures of the town, from the point of view of its constituent lines, can be measured exactly through the measure of “integration”. The “integration value” of each line reflects its mean linear “depth” from all other lines in the system. We can then map these integration values, and produce a global integration map of the whole of the town.

Integration values in line maps are of great importance in understanding how urban systems function because it turns out that how much movement passes down each line, is very strongly influenced by its “integration value”, calculated in this way that is by how the line is positioned with respect to the system as a whole.¹⁵

The integration core of a settlement will be the pattern made by the 10% of most integrated lines. This integration core will give you a pattern of how the inside of a settlement can be reached from the outside and where the greatest possibilities of movement are likely to occur. It has been claimed that people do move along these integration cores as the rest of the town is easily accessible, due to the idea that they are more likely to encounter other people.

¹⁴ For more detailed information, see the article by Echenique Martin Jose, An Explanation on Space Syntax Analysis and its Possible Use in Museum Design, 1991. Available at ECA library, Heriot-Watt University.

¹⁵ The creator of Space Syntax is Professor Bill Hillier at the Bartlett School of Architecture, London. A useful source on the subject Space Syntax, see Hillier, Bill, Cities as movement economics, Urban Design, International, 1996.

If we also take the bottom 50% of integration values and their respective lines, and allow them to show on the axial map, an idea emerges of how the less integrating lines join the more integrated ones. Along the more integrating lines, there will be larger convex spaces and these lines will be of a more public nature, while the less integrated lines will show the more private domain of the settlement.¹⁶

It is important to note that the software used in this research is an Edinburgh College of Art-developed version and should not be confused with the newer, interactive computer modelling tool Axman (the Bartlett software).

Conclusion

Part Three will be concentrated on the application and analysis of Halden with the main focus on the town's selected places in the past and the present. It will then be important for the researcher to use a place analysis that can provide a theoretical framework for design that can be very useful for helping us better understand the design issues. This theoretical approach drives such activities as understanding the design process and how it can be improved.

In the next part, it is also important for the researcher to use the place analysis as a part of the research to be able to try out the hypothesis: "A people-friendly town is not just a collection of people-friendly places but a linked network of these so integrated into a coherent whole that the overall settlement can readily be perceived and effectively planned". At the same time, it will contribute to answers concerning the research question:

¹⁶ Adopted from the article by Echenique Martin Jose, An Explanation on Space Syntax Analysis and its Possible use in Museum Design, 1991. Available at ECA library, Heriot-Watt University.

- How is integration achieved in the context of the whole town?
- What are the indicators of overall quality in the context of public places in Halden?

It has always been easy to identify mistakes made in the past. It is altogether more difficult to prescribe better ways of approaching the problem of making urban areas more user-friendly. It is where most human contact and interaction take place. It is the part of the urban area to which the public have physical and visual access. It is probably fair to say that traditionally, building craftsmanship was not just about buildings, but also spaces.

Today we are witnessing a return to the spirit of living in towns and cities that is characterised with well-loved traditions. The object has now become the public realm, the space between buildings rather than the buildings themselves. This is the central theory of this thesis, with Halden providing a rethink to test the ideas of Gehl and others, and to shed light on their perspectives.

The place analysis is used in Chapter 4 to evaluate the places in the past, in Chapter 5 to evaluate the places today, and in Chapter 7 to evaluate the places in the future.

Observation is a fact of everyday life. We are constantly observing other people and events as a means of securing information about the world around us. The method is utilised by sensing and feeling the space. Sensing is defined as experiencing through our senses; in this case, that will be by sight, hearing, smell and feeling the space. The senses are essentially frontally oriented, and one of the best developed and most useful senses is the sense of sight.

The thesis found that Jan Gehl's theory on outdoor life, can be very useful in the research of places in Halden. The theory is important to have as an addition to the observation research. This, to be able to know "what to look for" during the observation research, as a part of using the senses. In addition to observation, a questionnaire was designed. A questionnaire is an important element of the total research design. At its best, it is a remarkably versatile method of gathering information about a wide variety of topics. Used with care and understanding, it can provide valuable data, which otherwise, would not be available. The general form of questionnaire lies between two extremes. At one end of the continuum lies a highly-structured questionnaire, consisting of a series of formal questions, designed to attract answers of limited response. At the other extreme is the unstructured questionnaire, where formal questions are replaced by a freer style of investigation.

In practice, surveys frequently mix the style of questioning. Clearly, this cannot be done without a thorough background knowledge of the subject. Both the observation and the questionnaire method are used in Chapter 5 to evaluate the places today, and in Chapter 7, to evaluate the places in the future.

In addition to these methods, these parts describe the usefulness of space syntax that is used in Chapters 6 and 7 to evaluate the places and the town as a whole.

Space syntax originated in the early seventies in an effort to understand why, from a spatial point of view, buildings and built environments were as they were, and occupied only a small corner of the theoretically vast field of architectural and urban possibility. Design is a matter going from what we know to what we do not know. Techniques, on their own, cannot accomplish this. Only

theory can. Indeed, the usefulness of theories is exactly that they allow us to proceed from the known to the possible. Architecture is about the exploration of possibility and so are space syntax techniques. Space syntax is a representation of spatial systems in settlements and buildings.

Because the system is different from other parts, it is possible to use integration values to reveal the overall structure of the system. These configurational pictures of the town, from the point of view of its constituent lines, can be measured exactly through the measure of "integration". The "integration value" of each line reflects its mean linear "depth" from all other lines in the system. We can then map these integration values, and produce a global integration map of the whole of the town.

• How is integration achieved in the context of the whole town?

• What are the indicators of overall quality in the context of public places in Halden?

The intention in this phase analysis is to define uniformed town areas and to be able to save and repair the most interesting historical areas. Another intention is to find out how the places worked in the past and how they work today to be able to create good places for the future.

Observation is another useful method. We are constantly observing other people and events as a means of securing information about the world around us. The method is inspired by walking and looking the space

PART THREE APPLICATION AND ANALYSIS OF HALDEN

CHAPTER 4 THE KEY PLACES

Part three will be concentrated on the application and analysis of Halden, with the main focus on the town's selected places in the past and the present. It will then be important for the researcher to use place analysis, observation and questionnaire methods to provide a better understanding of the town's situation before it is possible to test the hypothesis: "A people-friendly town is not just a collection of people-friendly places but a linked network of these so integrated into a coherent whole that the overall settlement can readily perceived and effectively planned" and to answer the research questions:

- How is integration achieved in the context of the whole town?
- What are the indicators of overall quality in the context of public places in Halden?

The intention to use place analysis is to define uniformed town areas and to be able to save and repair the most interesting historical areas. Another intention is to find out how the places worked in the past and how they work today, to be able to create good places for the future.

Observation is another useful method. We are constantly observing other people and events as a means of securing information about the world around us. The method is utilised by sensing and feeling the space.

Sensing is defined as experiencing through our senses, and in this case, it will be by sight, hearing, smell and feeling the space.

In addition to observation, a questionnaire was designed. A questionnaire is an important element of the total research design. At its best, it is a remarkably versatile method of gathering information about a wide variety of topics. Used with care and understanding, it can provide valuable data, which otherwise, would not be available. Another method used is space syntax. Space syntax originated in the early 1970s in an effort to understand why, from a spatial point of view, buildings and built environments were as they were, and occupied, theoretically, only a small corner of the vast field of architectural and urban possibility. The usefulness of theories is exactly that they allow us to proceed from the known to the possible. Architecture is about the exploration of possibility and so are space syntax techniques. Space syntax is a representation of a spatial system in settlements and buildings.

Because the system is different from other parts, it is possible to use integration values to reveal the overall structure of the system. These configurational pictures of the town, from the point of view of its constituent lines, can be measured exactly through the measure of "integration". The "integration value" of each line reflects its mean linear "depth" from all the other lines in the system. We can then map these integration values, and produce a global integration map of the whole of the town.

The place analysis is used in Chapter 4 to evaluate the past and in Chapter 5 to evaluate the places today. Both the observation and the questionnaire method are used in Chapter 5 to evaluate the places today. The questionnaire and the space syntax method are in Chapter 6, combined to create a

new method, to be able to calculate the best movement pattern from a list of criteria. The thesis collected a selected number of criteria that were considered in the urban design, but other local criteria were added to meet the town's needs. All criteria are made by the people in the town, independent of the author.

The analysis tested 14 different options for new routes crossing the river and the idea was to use the inhabitants, together with the author, to select the best routes. This was done mainly because it is the inhabitants who are going to use the system in the future. They had the opportunity to express their needs by answering the questionnaire. The respondents varied greatly on each criterion in the questionnaire, so to be able to create an independent value, the author had to calculate an average of the answers. The next step was to use this value to select the best street map for the town's needs. Further, the criteria were tried against each street map and values were added to get a result. The higher the score, the higher was the integration for the town's movement pattern. The author made one chart to represent each street map and these have a column of values. These values were totalled together on each chart.

4.1. Introduction

Halden has burned down several times and on each occasion the town has, as a result, changed to some extent. Buildings have burned down or been demolished, and new buildings have been developed. Road systems have changed or been transformed, some have been closed and others reopened. Pedestrian routes have been created recently, and during all these changes, the same spaces that were created in the past are still there today. Some have changed, even becoming unrecognisable, but they are still there.

“The place” has always survived, throughout the various upheavals. This is a testament to its great importance as a key feature of daily life in Halden. It is called modernisation and many of the places have been drawn into this process more successfully than others. The place is often referred to as the heart of the city. The inner centre stands for the vibrancy of life, a place of assembly for everyone, either we want to negotiate or sell something, or to wander about and have a look, talk or meet people. Another option is just to rush through or be there to feel the pulse of life when sitting on a bench in the park or by a water-fountain.¹ Places in Halden meet people’s requirements to gather together and establish contact, but it is important to notice that the inner centre contains several small and large “hearts” with very different functions. This is the reason we cannot solve the whole environmental problem just by making the park and the market nice and popular; we have to make the inner centre work as a whole.

If we take a closer look between the buildings, we will find many places that have their own specific function. It is important, therefore, that all places are treated and protected on the same terms as the park and the market.

¹ The book, *Life Between Buildings*, 1987 by Jan Gehl is a classic in this regard, particularly the chapter “Three Types of Outdoor Activities” (pp.11-16).

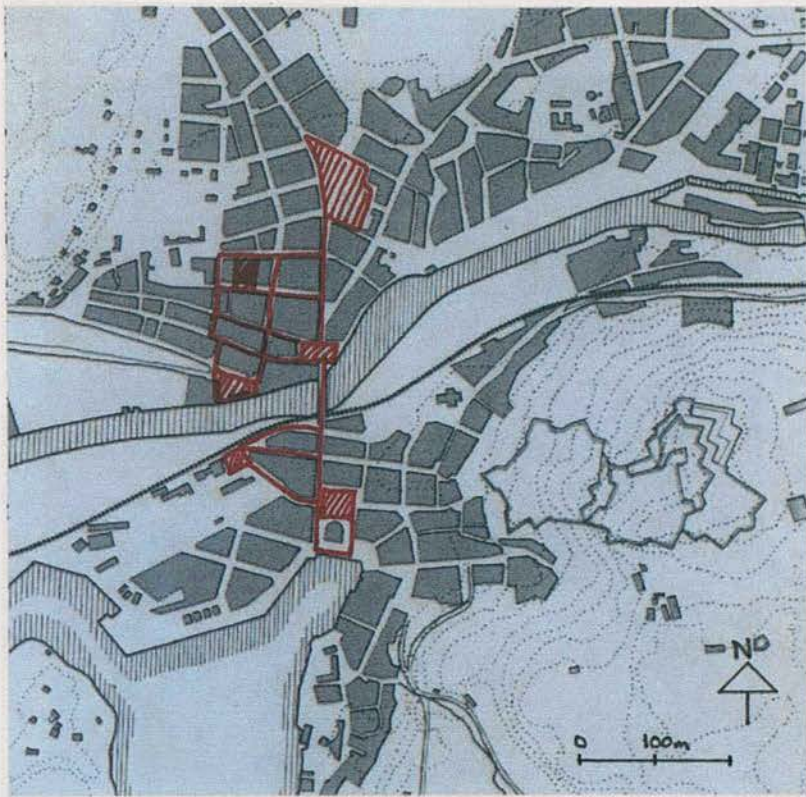


Figure 40. Location of the most important places and the connection between them, on the map from 1930.

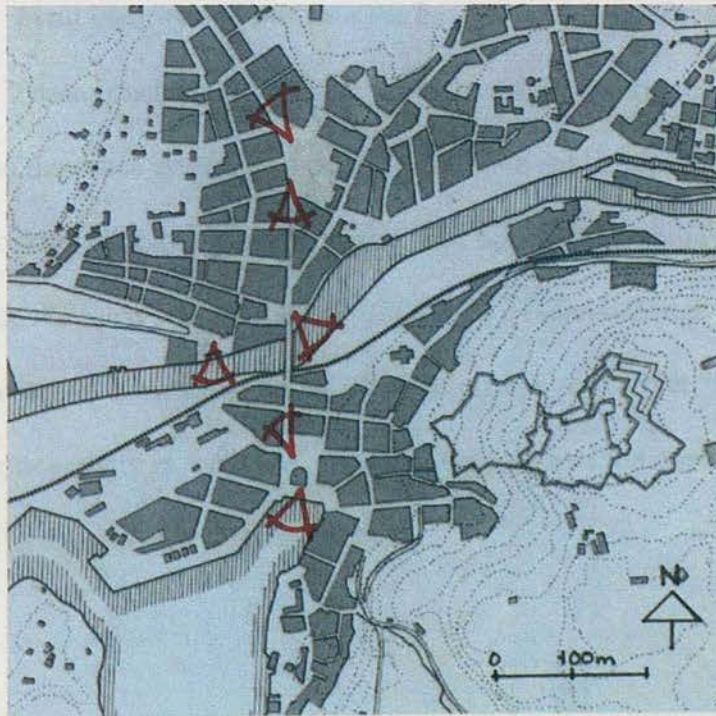


Figure 41. View points from lower areas.

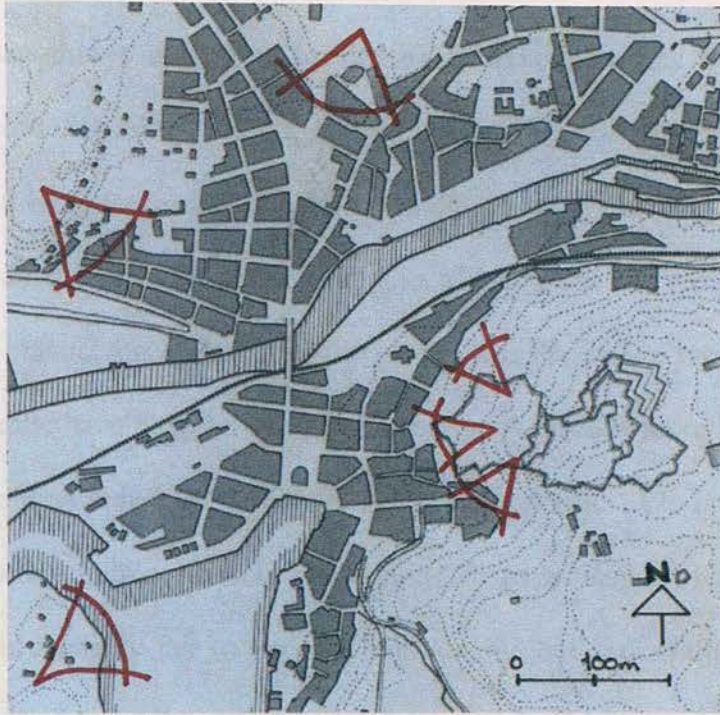


Figure 42. View points from higher areas.

In this study, I have taken 10 of the most important places in the town's inner centre. I will identify and evaluate the functions of these places in the past and present. These conclusions, together with the questionnaire, the observation technique and the space syntax method, will thus give me the opportunity to produce a working plan for these places and their optimum function in the future.

Since the town once again will go through a radical change that will transform the whole town structure, this will, of course, also affect "the places" and the outdoor activity in the town. This will then give us the opportunity to influence different spaces and their functions.

4.1.1. *Places in Halden today*

It has always been easy to identify mistakes made in the past. It is altogether more difficult to prescribe better ways of approaching the problem of making urban areas more user-friendly. It is the author's view that public spaces are, without a doubt, the most important parts of our towns and cities. It is where most human contact and interaction take place. It is the part of the urban area to which the public have physical and visual access. A place is more important and matters more than individual buildings or vehicular traffic. We must not forget that an attractive public place is very important to a feeling of well-being or comfort. It is probably fair to say that traditionally, building craftsmanship was not just about buildings, but also spaces. This should still be the case.

Today we are witnessing a return to the spirit of living in towns and cities that is characterised by well-loved traditions. The object has now become the public realm, the space between buildings rather than the buildings themselves.² This new way of thinking is also now recognised in Halden, making way for the car is now of minor importance. Making way for pedestrians and spaces is the meaningful task today. We must not forget the vehicular problem, because the car is here to stay, but they are not of the highest priority as they were in the 1960s.

² Greater detail regarding this subject can be found in Jan Gehl's book, Life Between Buildings, Using Public Space, 1987.

4.2. Places in the inner centre that must be considered of great importance:

- A Kristian V square.
- B Busterud park.
- C Storgata.
- D Wiel's square.
- E Town market.
- F Inner harbour.
- G Train station square.
- H Fish market.
- I Oscars road.
- J Culture square.³

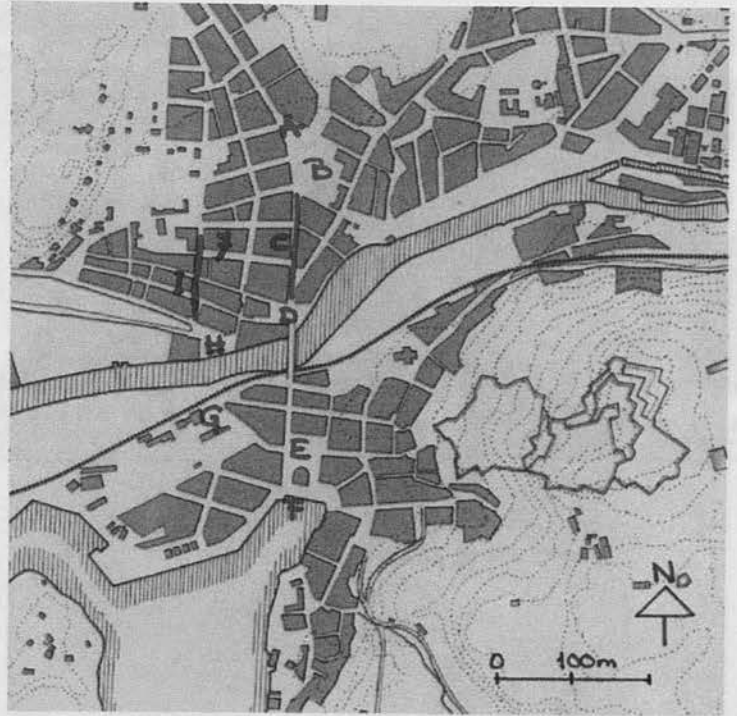
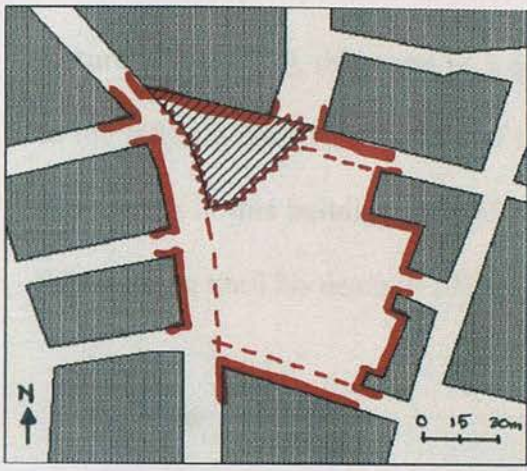


Figure 43. Important places in the inner centre. (See also Appendix 3.)

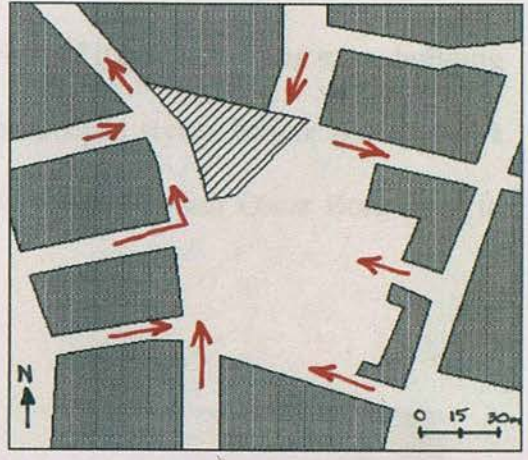
³ To define the importance of these ten places, the author has mainly concentrated on the public places within the town's inner centre with historical and functional importance that goes back decades. Some of the places have completely lost their identity and function and the idea is to help the future development to save the places and make them work in the inner centre as a whole.

4.3. THE PAST

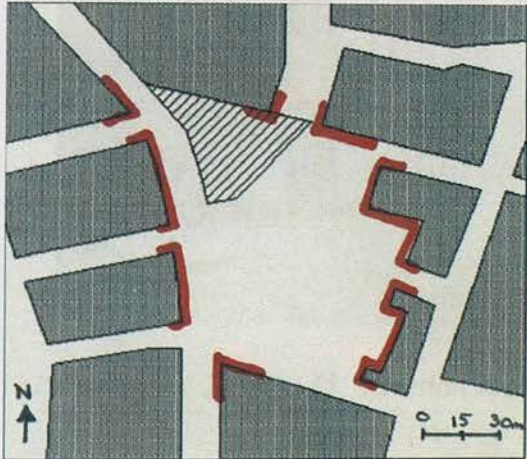
4.3.1. Kristian V square



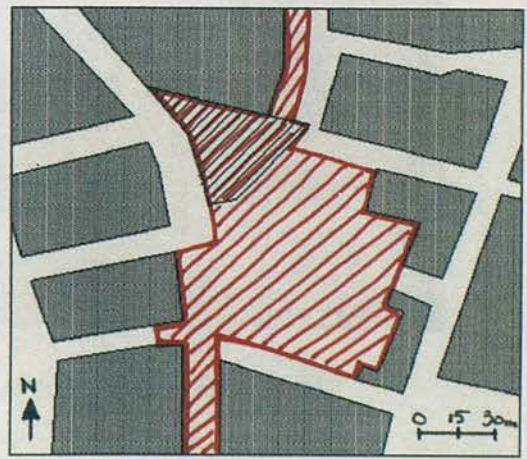
Edges in the area.



Access to the area.



Listed buildings.



Pedestrian areas.

Figure 44. Brief space analysis of the space, from the past.

The first important space in the inner centre from the north is Kristian V square, where in earlier days, people gathered for a variety of important events. If we look at the picture taken in 1910 (1920 as shown in the top left corner of the picture is incorrect), this gives us a good view of the square. The stone building to the left is a classical example of the Fredrikshald style. Emilie Aas started a paper shop in this building in 1883. The famous composer Oscar Borg lived in this building until his death in 1930.⁴



Figure 45. Kristian V square 1910. (photo: M. Olsen)

Kristian V square had, like so many other central places, important characteristics from the regulation plan after the town fire in 1826. A map from 1840 shows a row of buildings between Storgata and the north-side cemetery. About 1860, the north-side cemetery was relocated to north side park and was

⁴ Jacobsen Frank Kiel, Halden før og nå, H Andersen Bok- og papirhandel AS, 1991. (p.106)

named Busterud park and the buildings between the park and the road were demolished. Kristian V square was then naturally formed as a triangle.

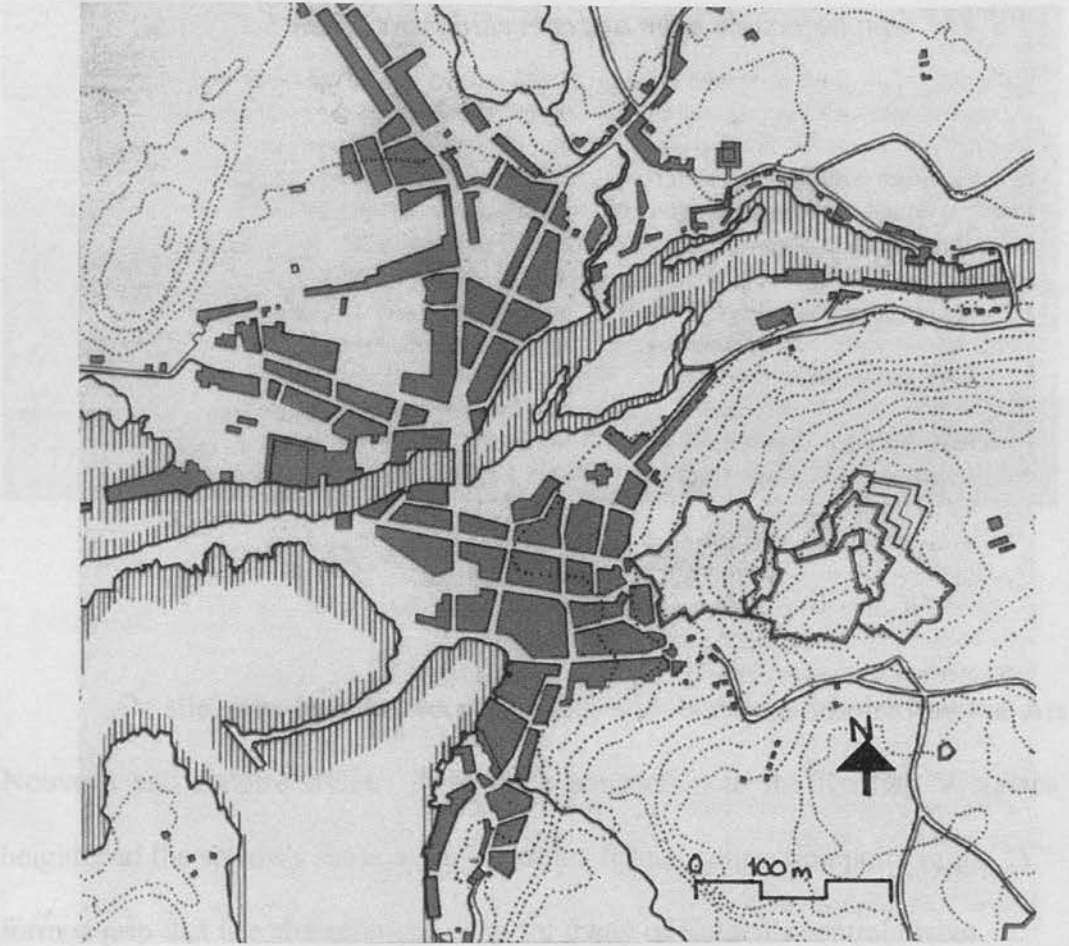


Figure 46. Map from 1840. (Illustration from Byggekunst 8/1991)

The development of the Catholic church started in 1874 and was actually designed to be on a much larger scale than it is today. The church was designed by the Dutch architect Albert Cuypers and was calculated to accommodate 10,000 inhabitants. The architect did not know then that Norway was a Protestant country and that the Catholic community was small. The plans for the church

were then radically reduced. The church was finished in 1877 and was hidden at the back of a row of buildings.⁵



Figure 47. The Catholic church.

Os alle` was built between 1910-30, with buildings inspired by the Art Nouveau and Empire styles. This alle's connection to the Kristian V square, heightened the square's sense as an important formal connection point in the "Y"-formed grip that is a characteristic form for many of Halden's central places.

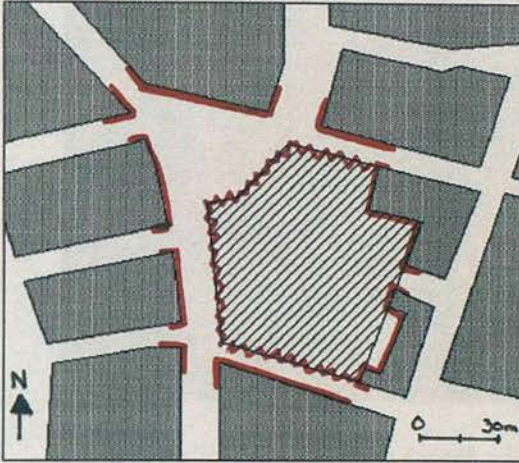
The rest of the buildings surrounding the square were mainly one- storey buildings, of mixed stone and timber. In the picture, we can see the old electrical lamp posts, these were new and very modern at the time. The old gas lamp posts were taken away around 1900. The square was covered with rough cobbled stone, very common as the first type of cobbling. In the middle of the square, a small drinking fountain was erected to feed thirsty people and animals.⁶ On the right

⁵ Jacobsen Frank Kiel, Fredrikshald-glimt, fra den gang oldemor var ung, Halden Arbeiderblad og Berg Sparebank, 1985. (p.130).

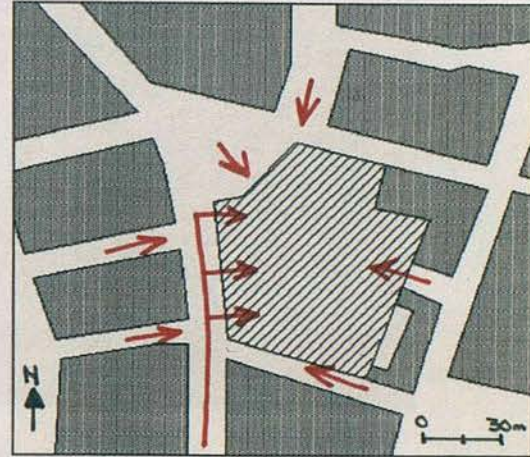
⁶ The new electrical lampposts are illustrated in the *Figure 42*. The old gas lamps look very much like the lamps in front of the Catholic church in *Figure 44*. For more information, see: Jacobsen Frank Kiel, Fredrikshald-glimt, fra den gang oldemor var ung, Halden Arbeiderblad og Berg Sparebank, 1985. (p.121).

hand side of the picture, a greener area was developed, marking the edge of the town park. This area was covered with sand and grass.

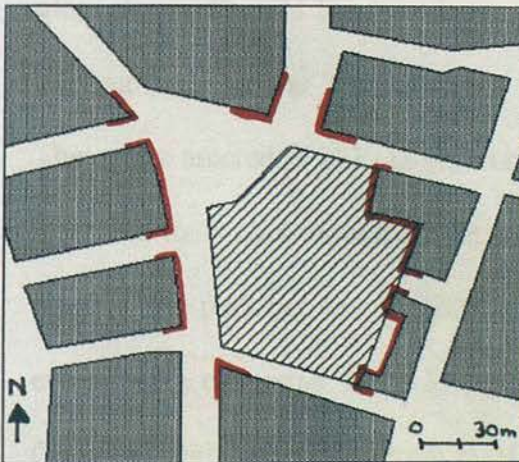
4.3.2. Busterud park



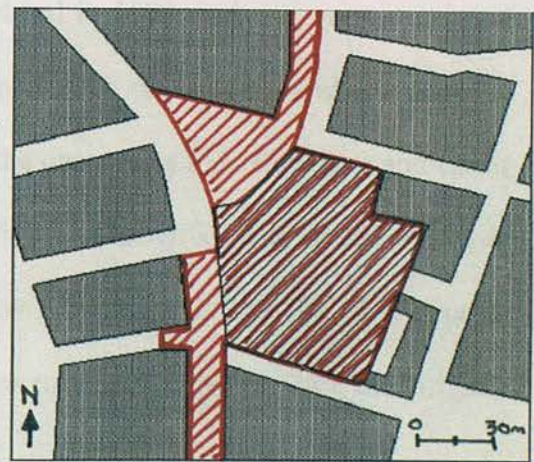
Edges in the area.



Access to the area.



Listed buildings.



Pedestrian areas.

Figure 48. Brief space analysis of the space, from the past.

This park is the only green area in the town's inner centre. It was constructed about one hundred years ago on ground that was previously occupied by the north-side graveyard and Kristian's church.



Figure 49. The Busterud park about 1900. (photo: Fredrikshald-glimt)

If we take a look at the picture taken about 1900, we find the park in its glory days. The old bandstand was completed in 1879, and was very popular at the beginning of the 20th century. The park also contains several monuments. They were erected in 1939 in gratitude to the composers F.A. Reissiger and Oscar Borg for their contribution to the promotion of Halden's place in the world of music. The park became the most attractive place to visit, and the most popular events were concerts. If we look at the picture below, we can see the Brigade Orchestra with Oscar Borg from 1904.⁷

⁷ Jacobsen Frank Kiel, Fredrikshald-glimt, fra den gang oldemor var ung, Halden Arbeiderblad og Berg Sparebank, 1985. (pp 129-130)

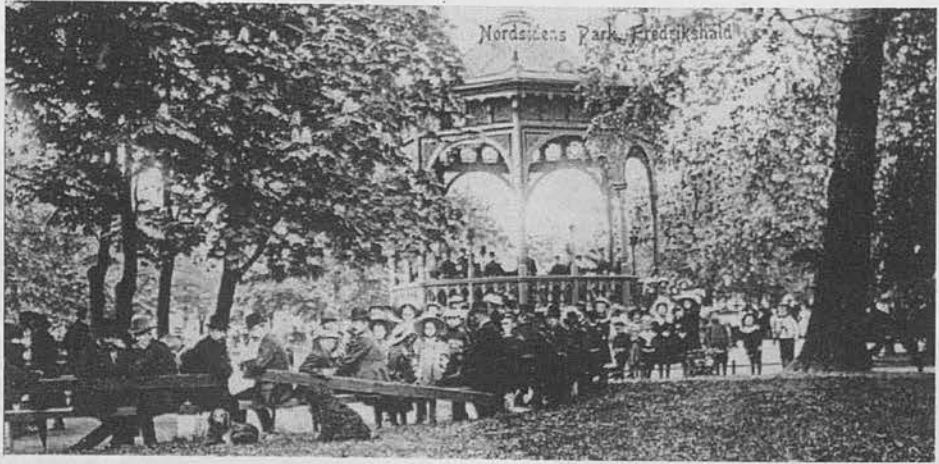


Figure 50. Oscar Borg from 1904. (photo: Fredrikshald-glimt)

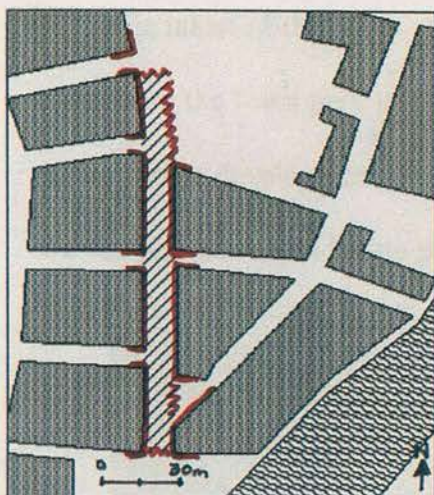
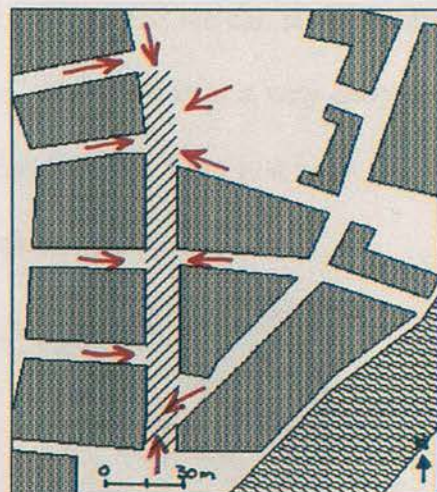
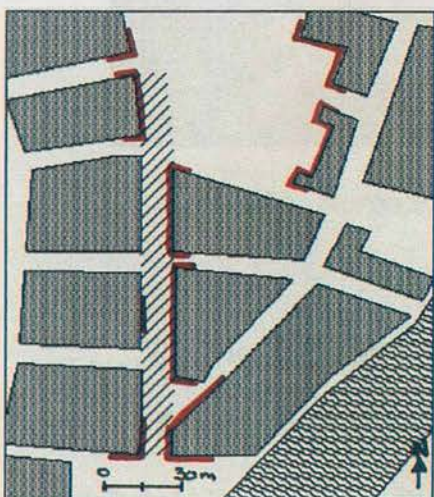
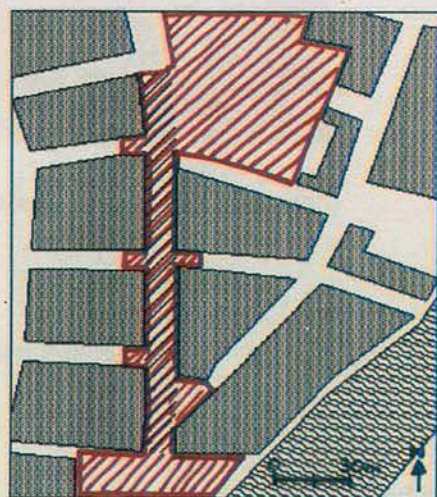
The next picture, is taken about 1900, and is the first part of the park to be developed. The old graveyard was located on the right-hand side of the picture and was developed later. The Busterud park was planted as we know it today. The old graveyard was enclosed by buildings, with partly limestone and timber fences.⁸



Figure 51. Early development of the park. (photo: Fredrikshald-glimt)

⁸ In the background in *Figure 48* the old Catholic church is visible, opened in 1877. Jacobsen Frank Kiel, *Fredrikshald-glimt, fra den gang oldemor var ung*, Halden Arbeiderblad og Berg Sparebank, 1985. (p 130)

4.3.3. Storgata

*Edges in the area.**Access to the area.**Listed buildings.**Pedestrian areas.**Figure 52. Brief space analysis of the space, from the past.*

Storgata is the main street in the town. It runs from Kristian V square in the north to the inner harbour in the south. This street became the main centre for the town's activities. If we look at a picture taken around 1870 (*Figure 53*) we

find that low timber buildings are still prevalent in this part of Storgata. This picture is taken of the north part of the street. At the end we can see Kristian V square and the town park at the top right-hand side. This is at a very early stage of the park's development, and we can see that the trees have just been planted. We can also see the old lamp posts on the developed pavement.⁹



Figure 53. Storgata about 1870. (photo: Fredrikshald-glimt)

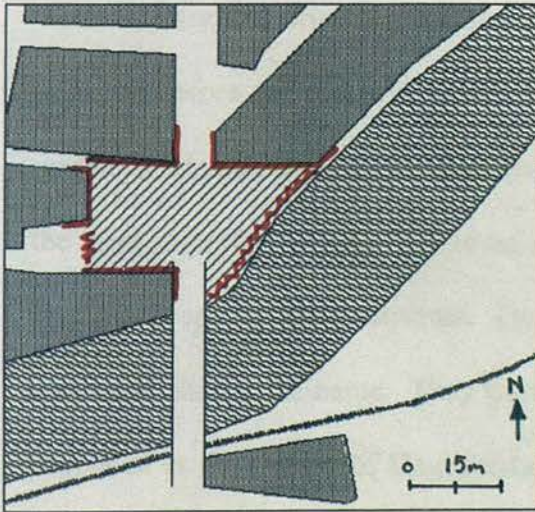
If we look at a picture taken facing the opposite direction about 30 years later, we find that most buildings are developed in stone and have the very typical Fredrikshald Empire style. We can also recognise that the street is developed as a long straight line, all the way down to the inner harbour, crossing the river Tista. This was still the early stage of stone buildings. Most buildings behind the main street were still very much low timber buildings.

⁹In Figure 50, we find the park newly developed and the Catholic church was not there. The picture is probably from the early 1870s. Jacobsen Frank Kiel, *Fredrikshald-glimt, fra den gang oldemor var ung*, Halden Arbeiderblad og Berg Sparebank, 1985. (p.116).

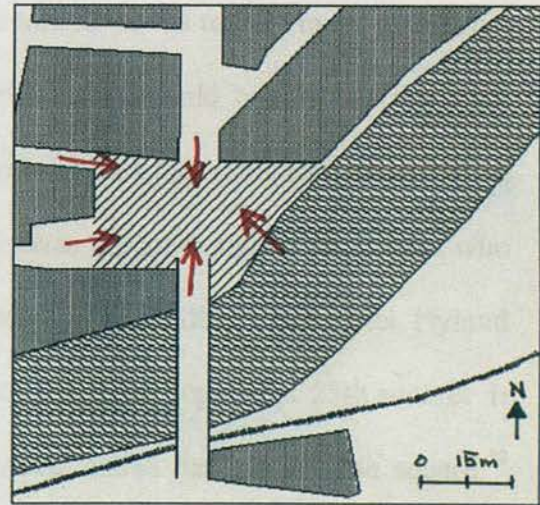


Figure 54. Storgata 1905. (photo: Fredrikshald-glimt)

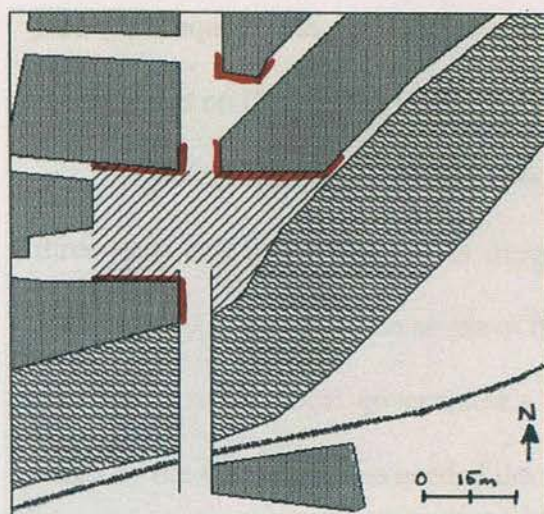
4.3.4. Wiel's square



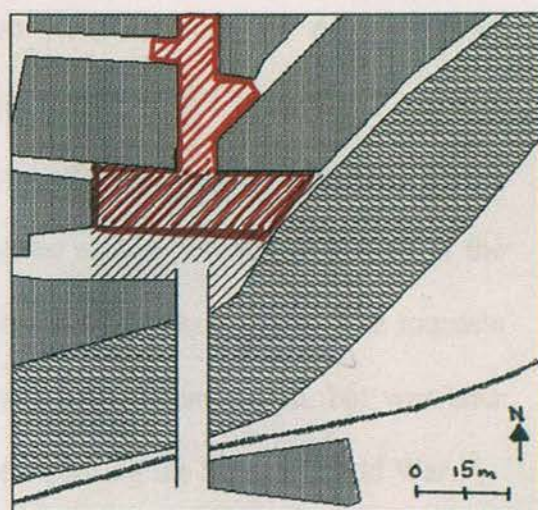
Edges in the area.



Access to the area.



Listed buildings.



Pedestrian areas.

Figure 55. Brief space analysis of the space, from the past.

Three of the four great buildings surrounding the square were connected to the Wiel family, so Wiel's square seems to be an appropriate name for the area. Wiel's square was originally located in the middle of the town's inner centre, but that was before the old bridge was demolished. The old bridge was the main reason for Halden having just one inner centre at the time. This square used to be the most important place in the town. This was the main square for people who wanted to speak or demonstrate. Two men, Harry Alhsen and Axel Nyland wanted to change the name. They wanted to call it the September 25th square. It happened at the climax of Dag Solstad's novel called September 25th square.¹⁰ The "common folk" had won the vote, hoping to turn down membership to the European common market. The mighty Wiel family had to bow to the majority.

¹⁰ Dag Solstad is a highly respected Norwegian writer who wrote a novel based on "common folk" in Halden, *25. September-plassen*, 1975.

But town squares do not change names so easily in Norway. A voted down resolution is no October revolution. The name is still Wiel's square.¹¹

Before the Second World War, one would hear the bubbling water from a three-level cast iron fountain that decorated the square. By the beginning of the 20th century, it had become so worn that it had to be taken down. The fountain was stored in the local government's storage building on Mølen, but was later taken by the Germans, who needed the material during the Second World War.¹²

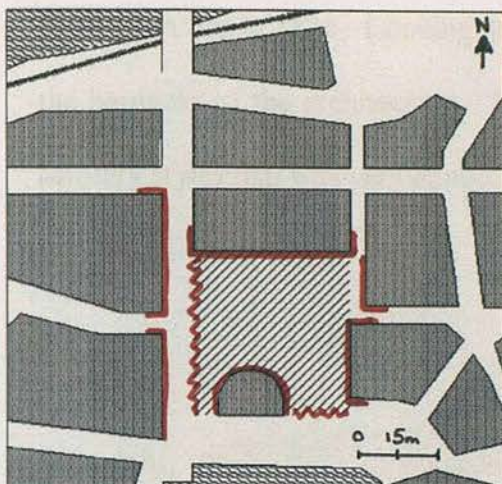
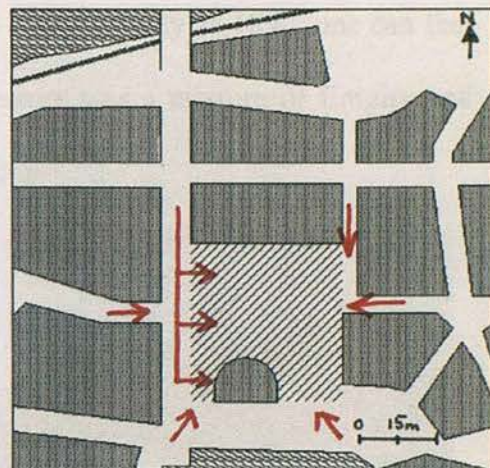
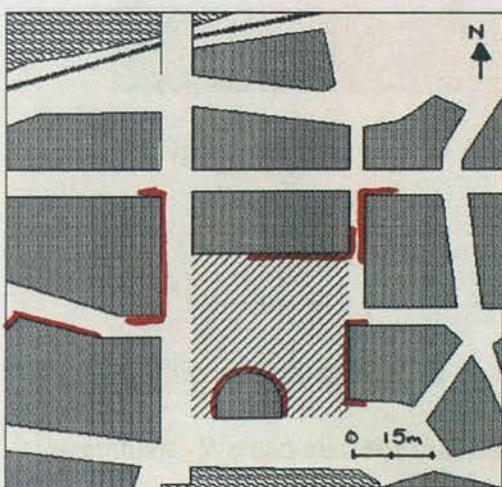
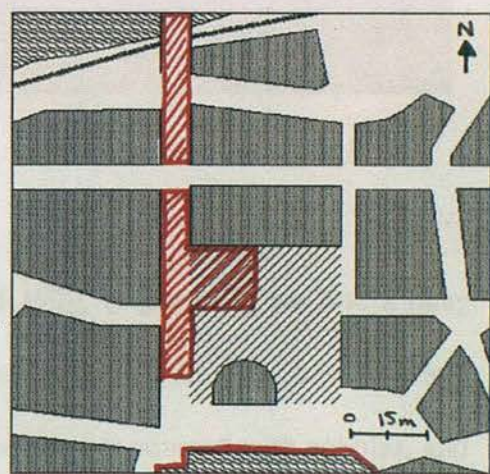


Figure 56. Wiel's square 1930. (photo: E. Sem, Halden før og nå)

¹¹ Norsk Arkitekturforlag, Byggekunst, "Wiels plass i slutten av september", an article by Ulf Grønvold, *Halden et byportrett*, 8/1991.

¹² Jacobsen Frank Kiel, *Fredrikshald-glimt, fra den gang oldemor var ung*, Halden Arbeiderblad og Berg Sparebank, 1985. (p. 111).

4.3.5. The market

*Edges in the area.**Access to the area.**Listed buildings.**Pedestrian areas.**Figure 57. Brief space analysis of the space, from the past.*

The market space was also an important area. It was called the town's living room, and was celebrated every year by festivals and as a collecting point after the 17th of May parade (Norwegian Constitution Day).¹³

¹³ Jacobsen Frank Kiel, *Halden før og nå*, H. Andersen Bok- og papirhandel AS, 1991 (p. 28).

Most of the buildings surrounding the market were rebuilt after the last great town fire in 1826. Looking at a picture taken as early as 1890, one can feel the hardness of the architecture. The architecture was a mixture of Empire and Military styles that was very common at that time.



Figure 58. The market 1890. (photo: E. Sem, Halden før og nå)

If we look at a picture taken around 1900, (*Figure 59*) we find a busy market. This was the best place to find or alternatively to sell your best fruit and vegetables. We can also see that the whole market was covered with cobbles, and that the space was used for parking. In the middle of the market, a memorial ornament is found. This is in honour of a man called Peder Normand. The ornament was unveiled 4th of July 1851 on King Oscar I's birthday. It was surrounded by a cast iron fence and had a gas lamp post in each corner.¹⁴

¹⁴ Jacobsen Frank Kiel, Fredrikshald-glimt, fra den gang oldemor var ung, Halden Arbeiderblad og Berg Sparebank, 1985. (p. 53).



Figure 59. The market around 1900. (photo: Fredrikshald-glimt)

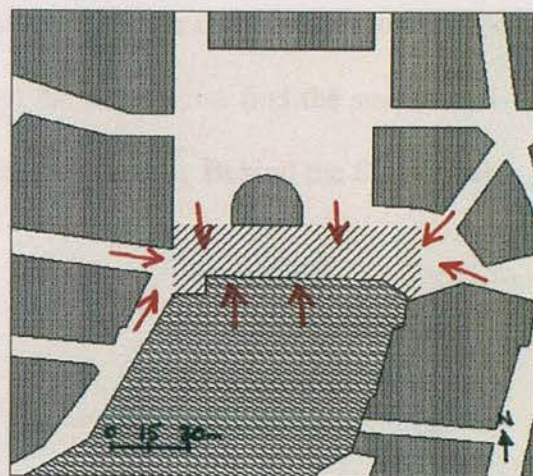
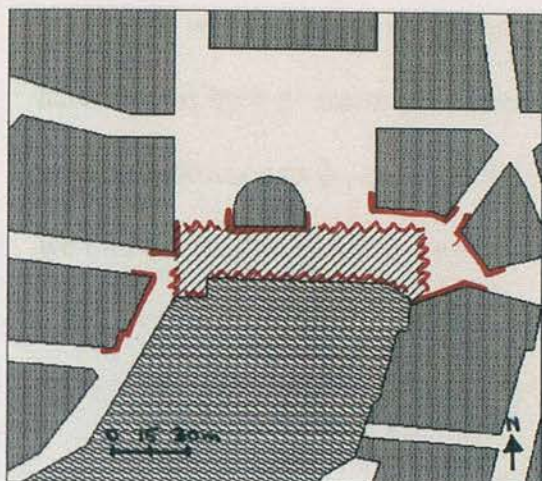
The most peculiar building surrounding the market is the half circular bazaar. It was designed by the state-engineer Gustav Blom Kielland in 1882. The bazaar was finished 1884 and this act extended the market area further. Behind the bazaar, we find the old custom-house, facing the inner harbour.¹⁵



Figure 60. The bazaar in 1888. (photo: Fredrikshald-glimt)

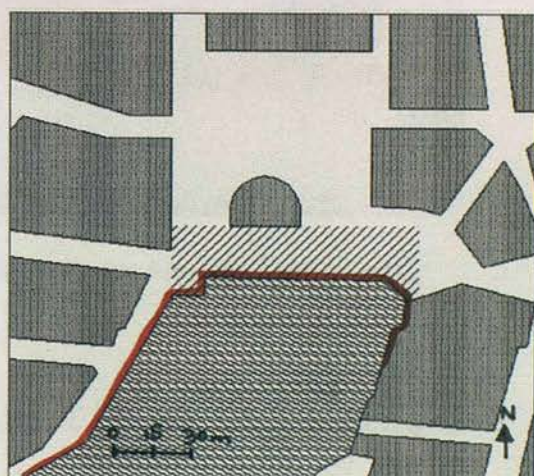
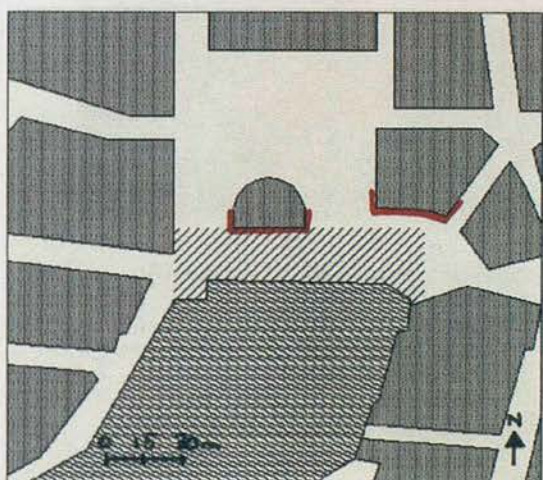
¹⁵ Kielland was the first engineer who was employed by the government in Halden and was involved in many project in the next 48 years. Jacobsen Frank Kiel, Fredrikshald-glimt, fra den gang oldemor var ung, Halden Arbeiderblad og Berg Sparebank, 1985. (p.47).

4.3.6. Inner harbour



Edges in the area.

Access to the area.



Listed buildings.

Pedestrian areas.

Figure 61. Brief space analysis of the space, from the past.

The custom-house is marked by the same mixture of Empire and Military styles as the surrounding area. The reason is that the same architect was responsible for most new buildings raised after the last town fire. The custom-house was designed by the famous Fredrikshald architect, F.C. Gedde in 1830-31.

In 1837, the other famous Fredrikshald architect, B.N. Garben developed a solution to the need to extend the building, and this is the result we see today.

If we take a look at a picture taken in 1924, we can clearly see how the harbour was built of stone. In the middle of the picture, we find the small Shell-kiosk that worked as the petrol station during this period. Behind the Shell kiosk, we find the custom building, repainted.¹⁶



Figure 62. The inner harbour 1924. (photo: Fredrikshald-glimt)

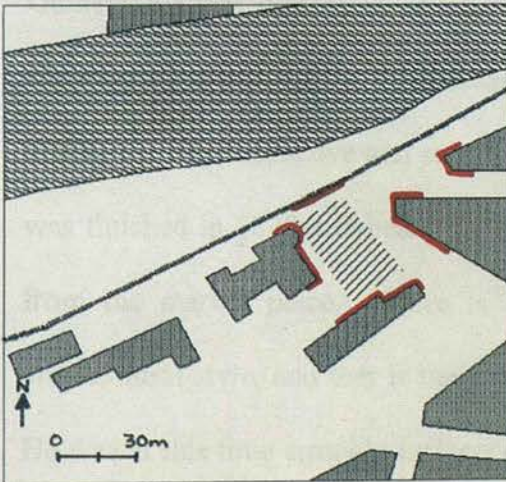
If we look at the oldest picture found of this area, taken in 1862 (*Figure 63*), we find a Mecca of mixed timber buildings, below the picturesque fortress hill. During this period, the area was marked by a fine mixture of sea-storage buildings and domestic housing. However, it wasn't always as quiet as shown in this picture. Often the inner harbour was crowded with boats that fed Halden with different types of merchandise.

¹⁶ Jacobsen Frank Kiel, *Fredrikshald-glimt, fra den gang oldemor var ung*, Halden Arbeiderblad og Berg Sparebank, 1985. (p. 31).

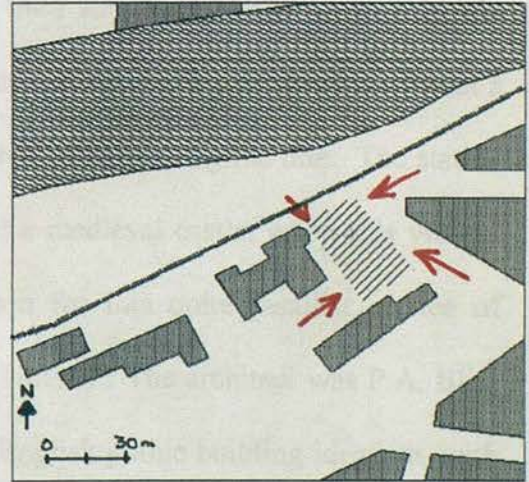


Figure 63. The inner harbour 1862. (photo: Fredrikshald-glimt)

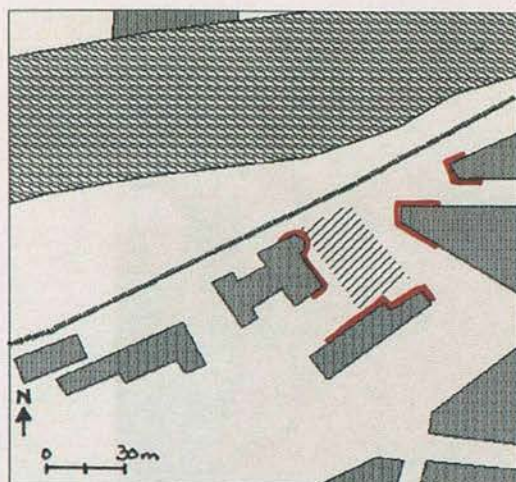
4.3.7. Train station market



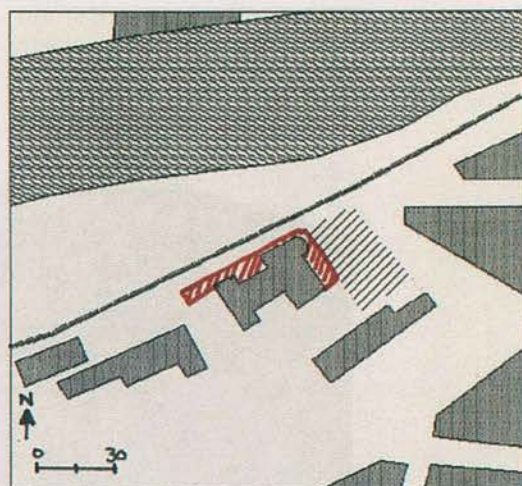
Edges in the area.



Access to the area.



Listed buildings.



Pedestrian areas.

Figure 64. Brief space analysis of the space, from the past.

This market was created when the railway station was developed. Looking at the picture taken in 1879 (*Figure 65*), a large timber roof in an unusual Swiss style covered the railway and part of the platform.¹⁷ Smaalensbanen from Gothenburg was opened in 1879, and all train station buildings along this line show signs of this epoch. Fredrikshald station became, architecturally, without a doubt, the most attractive and successful development along the line. The station was finished in 1878 and bears the mark of a medieval castle, when it is viewed from the market place. There is a reason for this quite peculiar choice of architectural style, and that is the architect himself. The architect was P.A. Blix. He was at this time strongly influenced by English gothic building idealism, with its asymmetric body and the great variation of silhouettes.¹⁸ He became the most important railway architect during this epoch.

¹⁷ Jacobsen Frank Kiel, *Fredrikshald-glimt, fra den gang oldemor var ung*, Halden Arbeiderblad og Berg Sparebank, 1985. (p.198).

¹⁸ Jacobsen Frank Kiel, *Halden før og nå*, H. Andersen Bok- og papirhandel AS, 1991 (p.40).



Figure 65. The train station 1879. (photo: Fredrikshald-glimt)

On the opposite side of the market place, we find the Grand Hotel, built in 1878. This hotel was raised on the foundation of the old “block houses” that surrounded the town from 1659. This was developed to stop the Swedish invasion in 1660.¹⁹



Figure 66. The Grand Hotel 1906. (photo: Halden før og nå)

¹⁹ These “block houses” resisted a six-week long invasion that started in January 1660 with 5000 men. Document published by the Norwegian Government, Miljøverndepartementet, “Stedsanalyse” Stedsanalyse-eksempel Halden, 1993 (p.9).

Looking at a picture taken in 1906, we find the same anonymous Empire style that was now on its way out. A new style made its way into Halden between 1900-30 and that was Art Nouveau. On the left hand side of the picture, we find a one-storey timber house. Just a few years later, an Art Nouveau building was raised on that site. This style represented a completely new direction. But in greater developments, Art Nouveau revealed the “historicism”. The architect behind this style was Albert Wille.²⁰ Therefore the railway station market is comprised of several different styles, but the styles interact together well, in ornament, texture and colour.



Figure 67. The Grand Hotel with the Art Nouveau building to the left. (photo: Halden før og nå)

When the railway opened, a low railway bridge was built over the river Tista. This bridge caused problems for boat traffic, so a new bridge was built in 1925 and opened in 1926. It was one of three special bridges built in Norway. It

²⁰ Document published by the Norwegian Government, Miljøverndepartementet, “Stedsanalyse” Stedsanalyse-eksempel Halden, 1993 (p.21).

was special because the middle part could be turned around so the boats could pass easily, and this bridge is still used today. This is the only one in Norway. Since the trains' arrival, the railway has created a boundary between it and the south side of the river.²¹

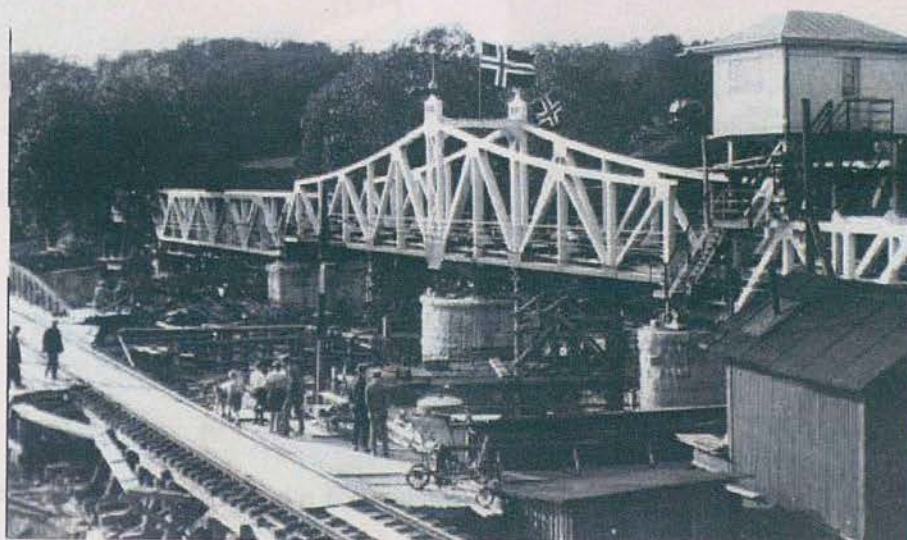
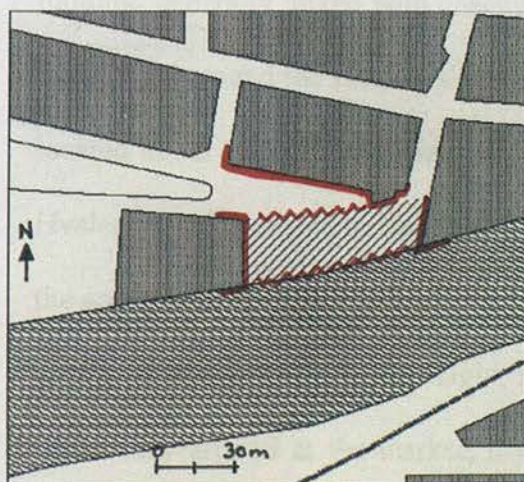
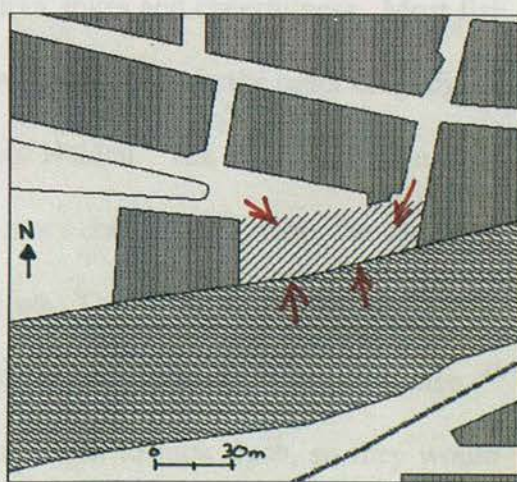


Figure 68. The old railway bridge in 1926. (photo: Fredrikshald-glimt)

4.3.8. The fish market

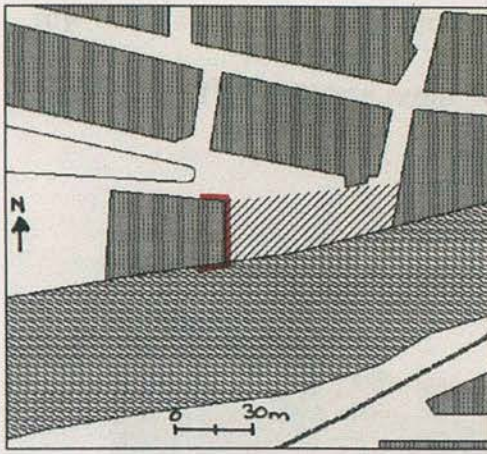


Edges in the area.

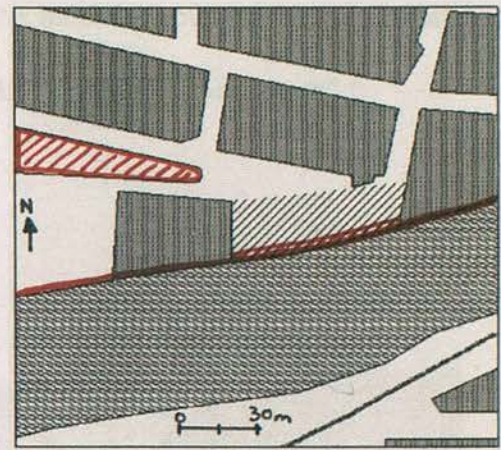


Access to the area.

²¹ Jacobsen Frank Kiel, *Fredrikshald-glimt, fra den gang oldemor var ung*, Halden Arbeiderblad og Berg Sparebank, 1985. (p.199).



Listed buildings.



Pedestrian areas.

Figure 69. Brief space analysis of the space, from the past.

When the new railway arrived in 1879, it claimed its space along Kirkegata. This is where the fish market had been located until the railway took precedence. A new fish market was then developed on the other side of the river Tista. It was a market filled with sound and excitements. Free competition was the order of the day. The market was regularly surrounded by non-stop noisy bidding, generally mixed with cheeky remarks, jokes and cheerfulness. Most fish came from around the Hvaler islands. A group of islands in the outer Singlefjord, located about three Norwegian miles outside Halden. The local fishermen from Hvaler rowed the three miles every day, or more correctly, the wife, the daughter, the servants or the hired girls did this tiring job. They were known as the "Hvaler girls", and they were a unique sight, rowing the heavily loaded boats like men.²² When they arrived at the market, it was important to look fresh, so they would

²² The town's fish market used to be located on the opposite side of the river, but had to move when the train station claimed its space on the south side in 1879. Jacobsen Frank Kiel, *Fredrikshald-glimt, fra den gang oldemor var ung*, Halden Arbeiderblad og Berg Sparebank, 1985. (p.81).

row into a creek on Brattøya just outside the inner harbour to change clothes and freshen up. This area, as a result becomes known as “dress-up creek”.²³



Figure 70. The fish market in 1906. (photo: Fredrikshald-glimt)

Looking at a picture taken 1906, we find a busy market with a bazaar where fish were sold. The river was crowded with different-sized boats. The market was mainly surrounded by two-storey high timber buildings. This was characterised as the poor area of the town. The area was called “Banken” and was occupied by poor factory workers and craftsmen. On the right hand side of the picture, we find a newly developed building. This was built in 1903 and was owned by the fishmonger Oscar Marinius Andersen.²⁴ This new building was also influenced by the typical Fredrikshald style.

If we look at the next picture (*Figure 71*) taken at the left of the fish market, we find the old seaside storage buildings. These were developed in the

²³ Jacobsen Frank Kiel, *Halden før og nå*, H. Andersen Bok- og papirhandel AS, 1991 (p.130).

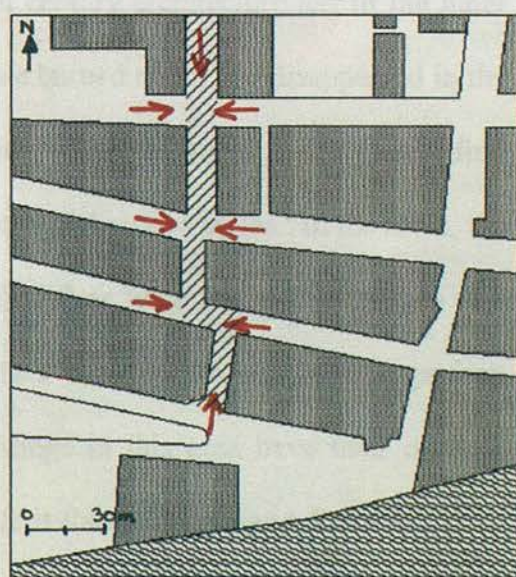
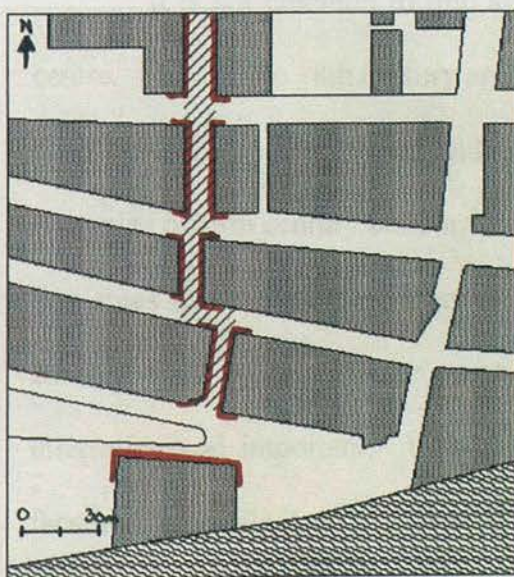
1760s, at the end of 18th century, and there were about 30 such buildings along the river, and the harbour area.²⁵ These two buildings are the start of the new area called Oscar's gate, where the oldest architecture in the inner centre is found.

Fredrikshald, Elven.



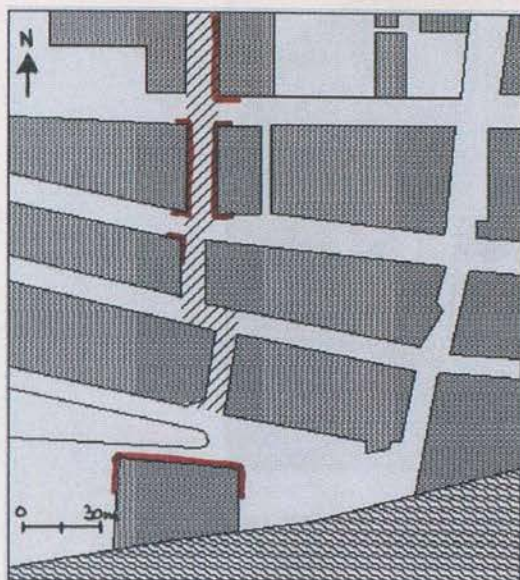
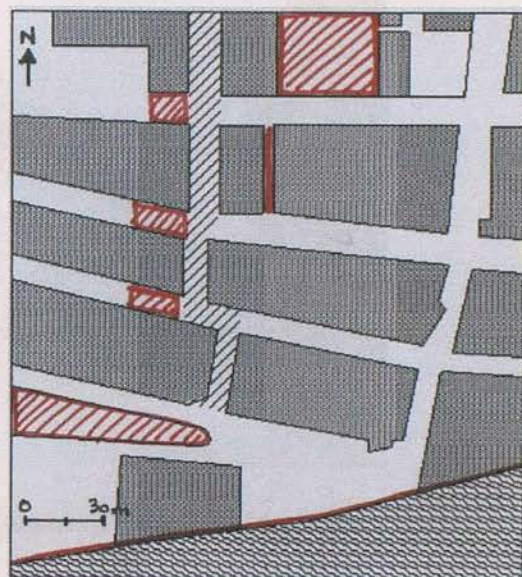
Figure 71. Sea-warehouses in 1904. (photo: Fredrikshald-glimt)

4.3.9. Oscar's gate.



²⁴ Jacobsen Frank Kiel, *Fredrikshald-glimt, fra den gang oldemor var ung*, Halden Arbeiderblad og Berg Sparebank, 1985. (p. 80).

²⁵ Jacobsen Frank Kiel, *Halden før og nå*, H. Andersen Bok- og papirhandel AS, 1991 (p.10).

Edges in the area.*Access to the area.**Listed buildings.**Pedestrian areas.**Figure 72. Brief space analysis of the space, from the past.*

It is not common to find any 18th century architecture left in the inner centre. Most of the 18th century architecture burned down and disappeared in the inner centre. On the fortress and on farms around the town, one can still find examples of 18th century buildings in baroque and rococo styles. In the town, the few areas that were spared from the horrible fires were the old Sørhaugen and Banken area, west of Oscar's gate.²⁶ This is what makes Oscar's gate so interesting and important. Very few buildings in this area have their original facades and details, but the 18th century style is found in form and dimensions.

²⁶ Some examples of authentic 18th century architecture is Bockramgården, Spinneriboden with the fish market and to some extent "konsevativen" see (Figure 70), document published by the Norwegian Government, Miljøverndepartementet, "Stedsanalyse" Stedsanalyse-eksempel Halden, 1993 (p.19).

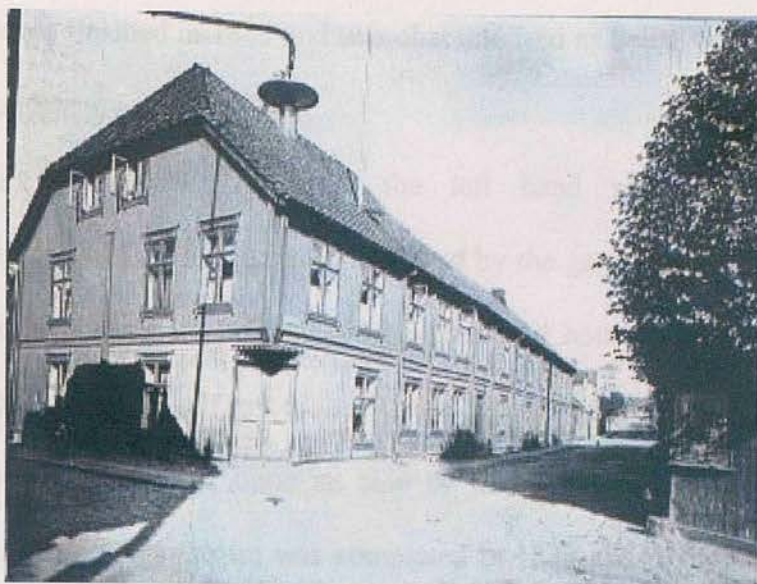


Figure 73. "Konservativen". (photo: Fredrikshald-glimt)

Viewing a picture taken around 1900, we find the "Konservativen". The next block located south from "Konservativen" is the oldest part. This part is mentioned in the tax protocol of 1765. This building had a new owner in 1767 and then added a second storey to the one-storey building. This timber building has the same Empire style as most great buildings in town. The name "Konservativen" is adopted from the conservative labour union that owned the building. "Konservativen" have Norway's oldest theatre, with performances dating back to the beginning of the 1790s. On the right hand side of the picture, we can see a garden. This garden had to make room for the town's new cinema that was finished in 1921.²⁷ We also find that this street is covered with cobbles.

²⁷ Jacobsen Frank Kiel, *Fredrikshald-glimt, fra den gang oldemor var ung*, Halden Arbeiderblad og Berg Sparebank, 1985. (p.137). Document published by the Norwegian Government, Miljøverndepartementet, "Stedsanalyse" *Stedsanalyse-eksempel Halden*, 1993 (pp. 19-20).

Along Oscar's gate on the right hand side, we find the old primary school for boys that were finished in 1881 and was characterised as being very attractive. This is again an Empire-style building.

Further up Oscar's gate on the left hand side, we find the Brockrammgården. This is also a building spared by the great fire. This building was developed in 1769 and is an interesting example of how an old Fredrikshald businessman organised himself in a town. This is a typical 18th century style with a touch of baroque. On the opposite side of Oscar's gate, we find the old Fredrikshald theatre. This theatre was completed in 1838 and is the only one in the country with a completely preserved baroque stage. In recent years, the building has undergone extensive restoration, and has now been more or less restored to its original glory. Fredrikshald theatre also has a very valuable collection of old stage scenery. It was the architect Garben who designed the theatre, and this was recognised to be his main development in the town.²⁸ In contrast to the inside, the outside has a very simple and plain form. It is created to be a two-storey high, long and narrow building. The theatre, the old boys' school and the cinema are the main buildings that create the boundary to the last space of our interest, the culture square.

²⁸ Document published by the Norwegian Government, Miljøverndepartementet, "Stedsanalyse" Stedsanalyse-eksempel Halden, 1993 (pp. 19-20)

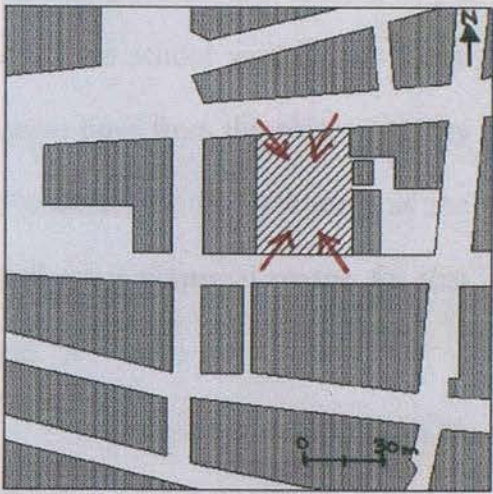
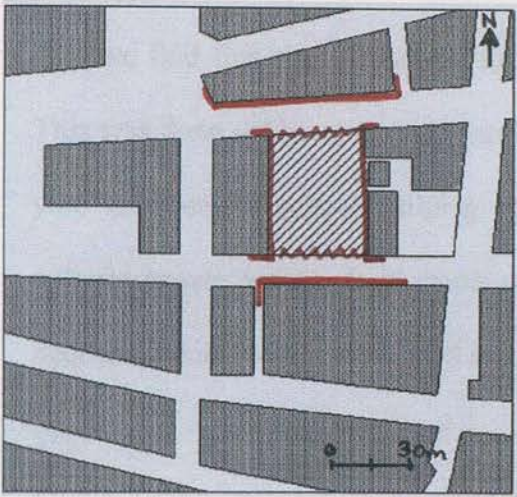


Figure 74. The old boys' school. (photo: Fredrikshald-glimt)



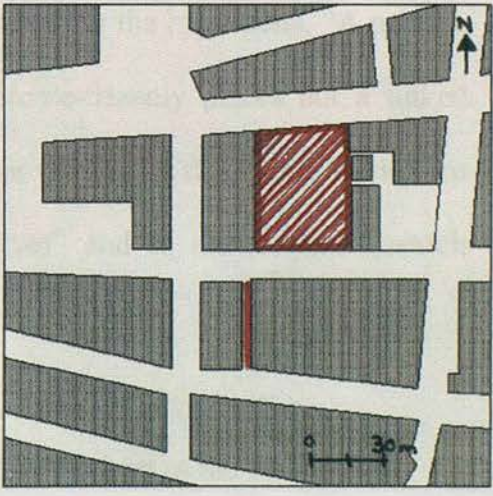
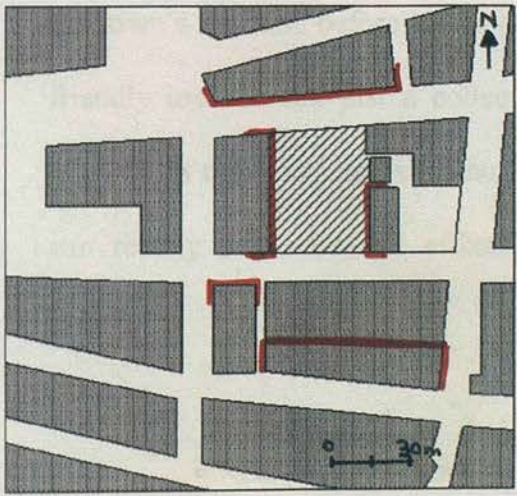
Figure 75. Brief space analysis of the space from the past

4.3.10. The culture square



Edges in the area.

Access to the area.



Listed buildings.

Pedestrian areas.

Figure 75. Brief space analysis of the space, from the past.

There is not much to say about the old place, that today is called the culture square. The reason is that this square in the old days was the school yard for the old primary school for boys. If we take a look at the old picture (*Figure 74*), we find that the gymnastic building divided the school yard in two parts. This was done deliberately to separate the younger boys from the older. It is the yard between the school building and the gymnastic hall that is known as the cultural square today. It is worth noting that there is a special reason for that decision, which will be discussed at a later stage.

Conclusion

This chapter concentrated on the application and analysis of Halden with the main focus on the town's selected places in the past. It was important for the researcher to use a place analysis method to provide a better understanding of the town's situation before it was possible to try out the hypothesis, "A people-friendly town is not just a collection of people-friendly places but a linked network of these so integrated into a coherent whole that the overall settlement can readily perceived and effectively planned" and to answer the research questions:

- How is integration achieved in the context of the whole town?
- What are the indicators of overall quality in the context of public places in Halden?

The intention to use a place analysis was to define uniform town areas and to be able to save and repair the most interesting historical areas. Another intention was to find out how the places worked in the past, to be able to create good places for the future.

The chapter found that buildings had burned down or been demolished, and new buildings had been developed. Road systems had changed or been transformed, some had been closed and others reopened. Pedestrian routes which had been created in the past are still there today. Some have changed, even becoming unrecognisable, but they are still there. It will now be important to analyse the places today, to be able to compare the past with the present. This will again give the researcher the overall summary needed to answer the research questions.

- How is integration achieved in the context of the whole town?
- What are the indicators of overall quality in the context of public places in Halden?

5.1. The importance of the questionnaire

The situation and the purpose of the survey today will be established. However, it is important to note that the survey's objective does not make the survey sufficient enough, even if the researcher has been living in the town most of his life. Therefore a questionnaire was designed.

CHAPTER 5 THE QUESTIONNAIRE

This chapter seeks to discover by using questionnaires as a method, an important element of the total research design. Questionnaires demand skill in composition and should be planned carefully to meet the needs of specific research objectives. Observation is another useful method used in this chapter to observe other people and events as a means of securing information about how the different places are used and it is particularly useful in checking the validity of answers given in questionnaires.

It was important for the researcher to use these methods to provide a better understanding of the town's situation before it was possible to test the hypothesis, "A people-friendly town is not just a collection of people-friendly places but a linked network of these so integrated into a coherent whole that the overall settlement can be readily perceived and effectively planned" and to answer the research questions:

- How is integration achieved in the context of the whole town?
- What are the indicators of overall quality in the context of public places in Halden?

5.1. The importance of the questionnaire

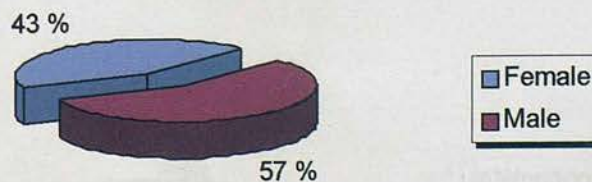
The situation and the purpose of the spaces today will be established. However, it is important to note that the author's opinion alone does not make the survey realistic enough, even if the researcher has been living in the town most of her life. Therefore, a questionnaire was designed.

A questionnaire is a method of obtaining specific information about a defined problem so that the data, after analysis and interpretation, result in a better appreciation of the problem. It is an important element of the total research design. Individual questions must be designed to attract respondents to give valid and reliable information about the subject of the enquiry, and to do this with the minimum distortion or bias. This cannot be done without a thorough background knowledge of the subject.

At its best, it is a remarkably versatile method of gathering information about a wide variety of topics. Used with care and understanding, it can provide valuable data, which otherwise, would not be available.²⁹

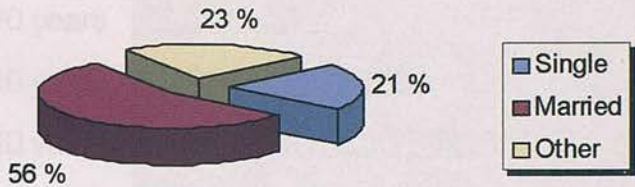
Two hundred and twenty (220) questionnaires were sent out, with 150 respondents. This was designed to be a closed and open-ended questionnaire that was sent to inhabitants aged between 10-61+, both sexes and mixed marital status (see Appendix 1).

Question 1. Sex:

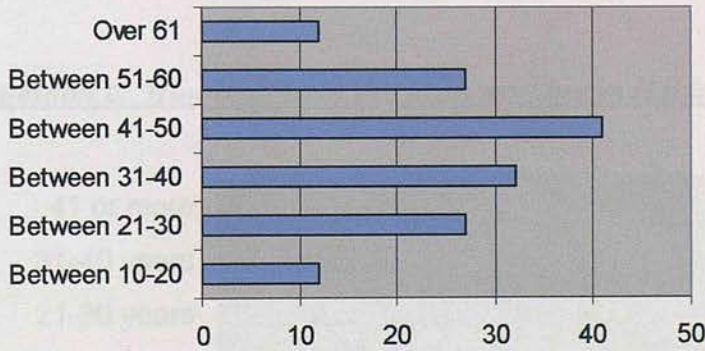


²⁹ For discussion of the different alternatives concerning a questionnaire see: Chisnall Peter M, "Questionnaires", Marketing Research, 1992 (pp. 109-135)

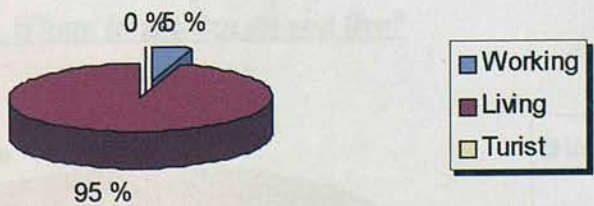
Question 2. Marital status:



Question 3. How old are you?

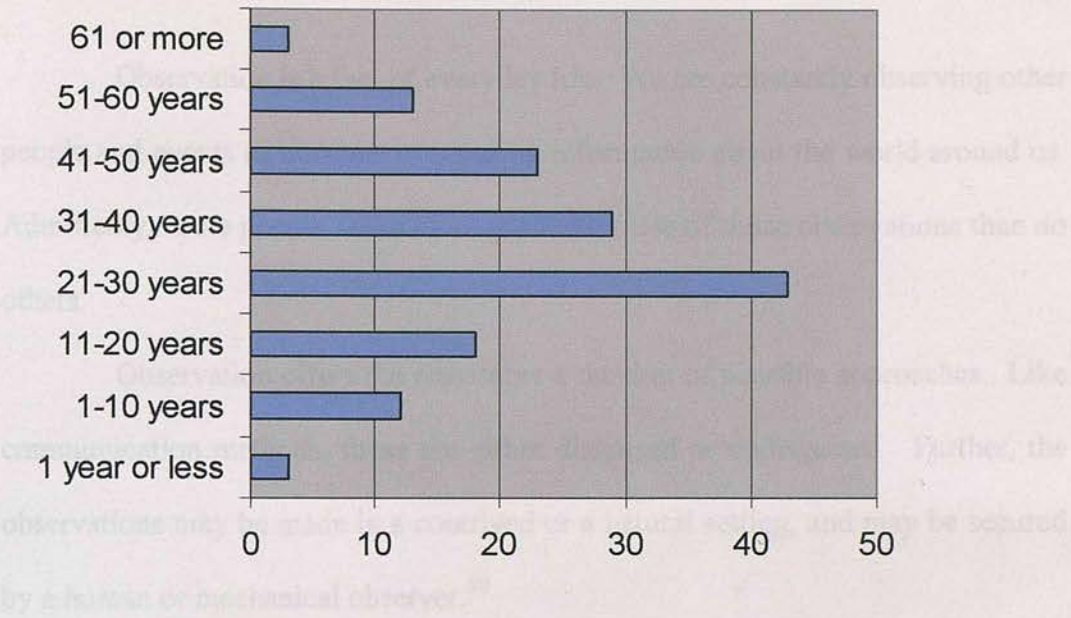


Question 4. What are you doing in Halden?

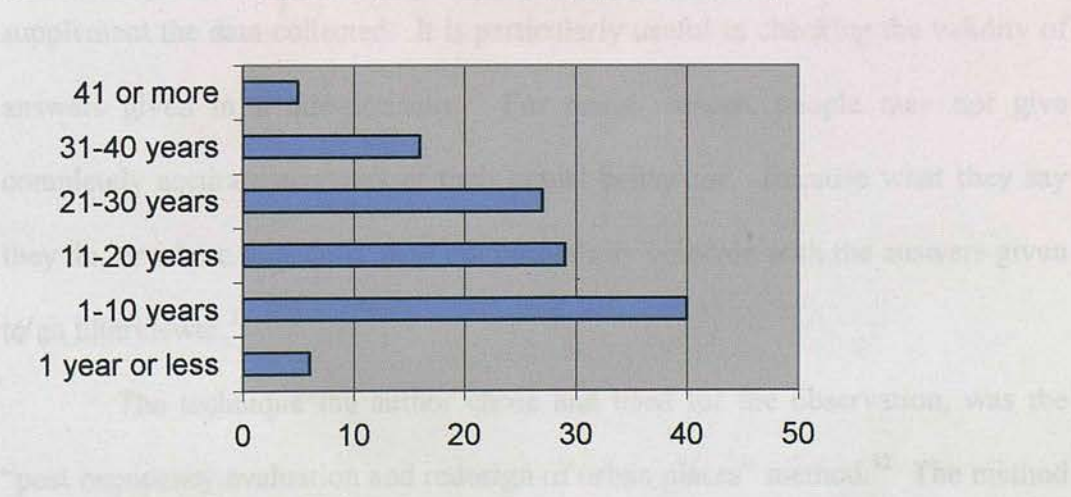


Question 5. How long have you been staying in Halden?

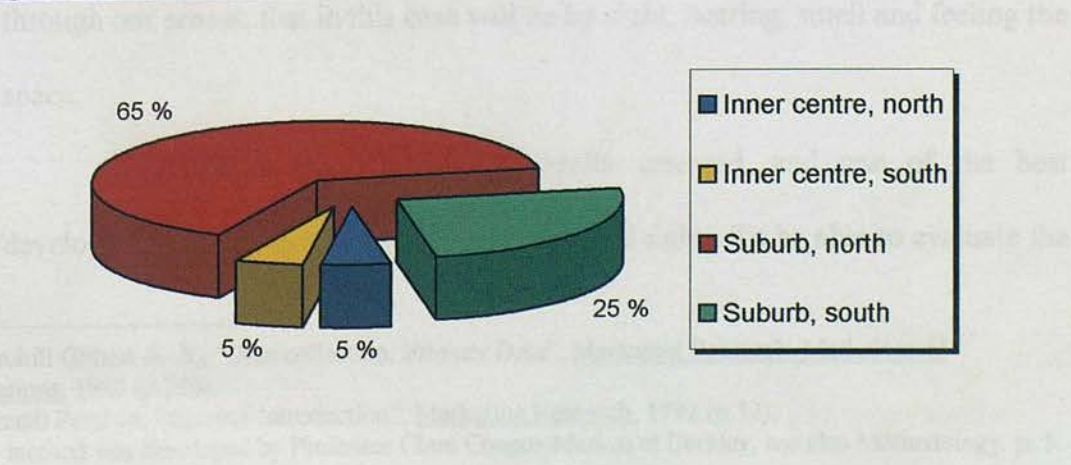
5.2 The importance of observation



Question 6. How long have you been working in Halden?



Question 7. Where in Halden do you live?



5.2. The importance of observation

Observation is a fact of everyday life. We are constantly observing other people and events as a means of securing information about the world around us. Admittedly, some people make more productive use of those observations than do others.

Observation offers the researcher a number of possible approaches. Like communication methods, those are either disguised or undisguised. Further, the observations may be made in a contrived or a natural setting, and may be secured by a human or mechanical observer.³⁰

It can be used alone or in conjunction with other forms of research to supplement the data collected. It is particularly useful in checking the validity of answers given in a questionnaire. For many reasons, people may not give completely accurate accounts of their actual behaviour. Because what they say they do, or where they do it, may not necessarily coincide with the answers given to an interviewer.³¹

The technique the author chose and used for the observation, was the “post occupancy evaluation and redesign of urban places” method.³² The method is utilised by sensing and feeling the space. Sensing is defined as experiencing through our senses, that in this case will be by sight, hearing, smell and feeling the space.

The senses are essentially frontally oriented, and one of the best developed and most useful senses is the sense of sight. To be able to evaluate the

³⁰ Churchill Gilbert A. Jr., “Data collection: Primary Data”, *Marketing Research, Methodological Foundations*, 1987 (p.258).

³¹: Chisnall Peter M, “General Introduction”, *Marketing Research*, 1992 (p.32).

³² This method was developed by Professor Clare Cooper-Markus at Berkley, see also Methodology. p. 5.

existing open space to see how they function for the user and feeling the space, the author observed the different areas during an ordinary weekday. The author was located in each space for 30 minutes from Monday to Friday between 11am-2pm in June 1996. The observation was made undisguised in a natural setting, mainly to feel the space and observe the human behaviour in each space.³³

5.3. Kristian V square

The square contains:

- The town's main bus stand
- Parking space
- Taxi rank
- Different types of shops
- Town utilities
- Offices

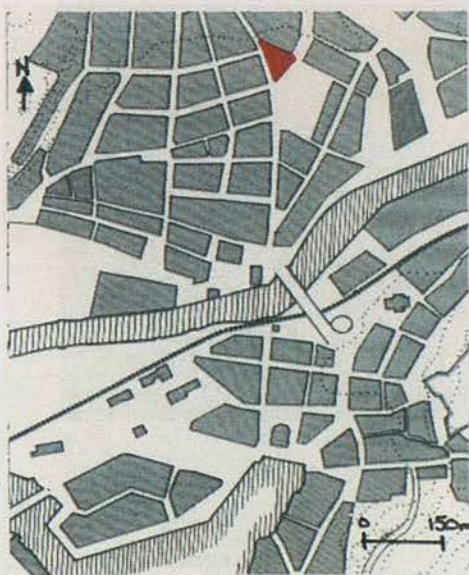
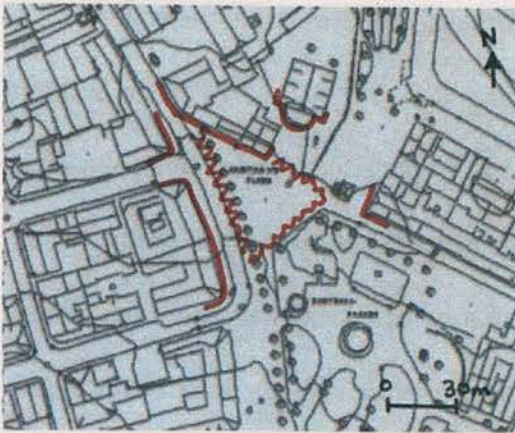


Figure 76. Location of the space.

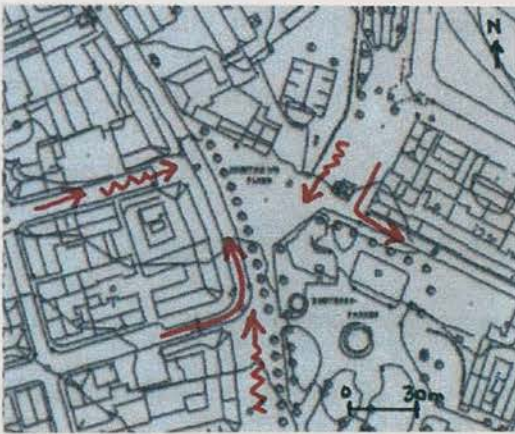
³³ The result of the observation is shown in Tables 3.3.5. It is one table for each place throughout this chapter.



Edges in the area



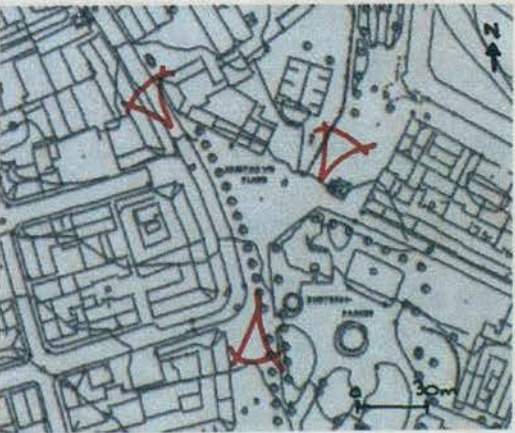
Access to the area



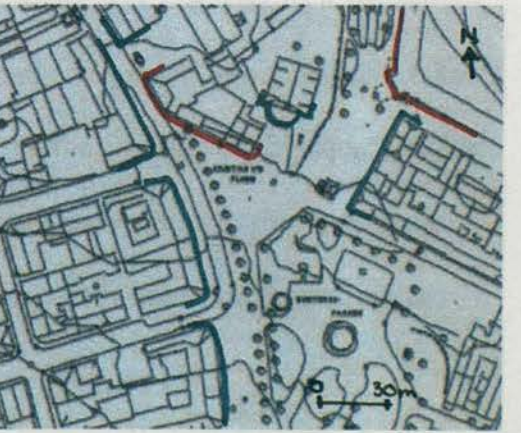
Pedestrian and car route



Listed buildings



Direction of view



Contrast of buildings, old (green) and new (red)

Figure 77. Space analysis of the space today.

The architecture of this square today is very much the same as it was one hundred years ago. The only exception is the north of the square, where most buildings have been demolished or burned down. The north-west has been rebuilt mainly in the same style as found in the 1900s. The exception is that the timber buildings have now been mixed with brick. The two-storey building now contains shops and a bank (see picture, Kristian V square). The north-east side burned down and was never rebuilt. This decision was favoured by the old Catholic church that was nearly hidden by the timber building. The beautiful brick church can now hardly fail to capture the eye, and is now categorised to be one of Halden's many architectural pearls. The rest of the surrounding buildings mainly contain the same type of shops as one hundred years ago.

One gem that has been missed for many years is the old "Pølse Ahlsen". This was a sausage kiosk designed as a small square pavilion. This kiosk was placed on the east side of the square. The good news is that the kiosk is rebuilt today in its original design on the same spot.

The square was for many years covered with asphalt and was used as a road-crossing that was very busy. When Storgata was changed to a pedestrian walk at the beginning of 1980s the square changed again. The asphalt was taken away, and the cobbles were again the base of the flooring. The square never ended up as the square it once was. Today, the square works as the inner centre's main bus-stand, a taxi-rank and the rest of the square is used as a parking space.



Figure 78. Kristian V square. (photo: Halden før og nå)

If we take a look at some pictures taken today, we find objects that do not work very well or are just misplaced. On the first picture, we can view the main bus-stand with its new bus shelters, but behind the first shelter, we find a lonely bench. The bench is placed in between new planted trees and new lamp posts. The new lamp posts are influenced by the design of the old gas lamp posts. A bench behind a bus shelter facing a car-park seems misplaced. But this bench has been placed there for a purpose, it is placed under a taxi sign, therefore, the purpose is to let people rest while waiting for their taxi. One solution may be that the taxi-rank be moved to a more suitable place for people to wait.



Figure 79. A lonely bench.

The next picture (*Figure 80*) was taken on the west side of the square. Here we can see that the local planning office has really made an effort to make nice sitting areas along the pedestrian walk. The problem is that no one ever uses it. There could be many reasons for its poor usage. The seats are modern and comfortable but the pedestrian walk is too small and narrow to cope with this arrangement. The seats are enclosed by a busy bus road and clothes from the shop are perhaps too close to the seats. The comfort is there but the well-being is missing.



Figure 80. Seating facilities.

The planning of planting can be a difficult task. It is important to plant the right plants at the right location. It feels wrong to plant a typical forest tree as pine trees in an urban situation. This type of tree keeps its green colour throughout the seasons, which is nice in a country with long and hard winters. It is important to state that this is the only part of Storgata on the north side that has access for vehicles, and it is mainly used by buses and delivery vehicles.

• Not place flowers people

• Like the vehicles that cover the square

• Like the historical buildings, as shown through the architecture

• Like the low buildings that work as a frame around people

• Like the greenery during the winter

• Like the "Johan" building and the house

• Like the character of the area

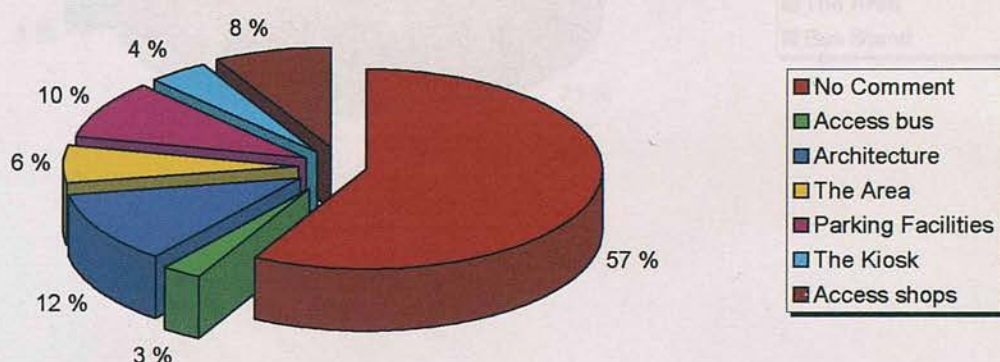
• Like the character of the area

The inhabitants' opinion of the square

The question relating to the square was:

5.3.1. What do you like and dislike most about Kristian V square?

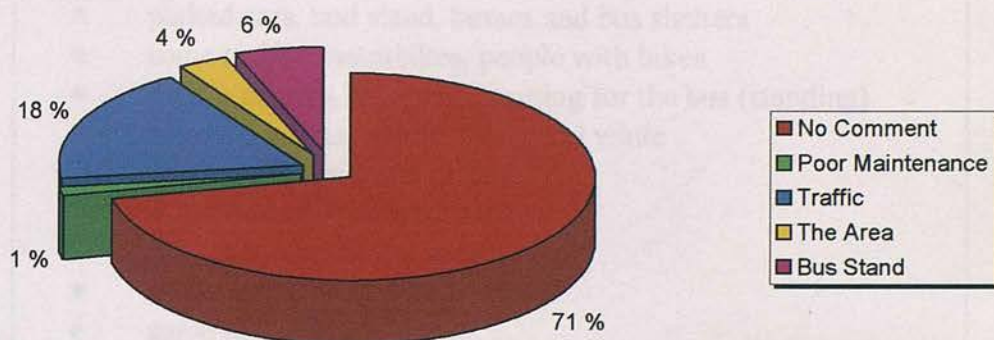
LIKE:



5.3.2. Single comments from inhabitants:

- Nice place to meet people.
- Like the cobbles that cover the square.
- Like the historical heritage that is shown through the architecture.
- Like the low buildings that work as a frame around people.
- Like the greenery during the summer.
- Like the "Harlem" building and the kiosk.
- Like the atmosphere of the area.
- Like the Catholic Church.

5.3.3. *DISLIKE:*



5.3.4. *Single comments from inhabitants:*

- Miss the market shopping from “the old days”.
- Do not like the form of the square today.
- Do not like the poor entrance for vehicles through the area.
- Find the square very disorganised.
- The town has too much asphalt and too little greenery.
- Nothing happens.
- Too few bus shelters.
- Do not like the crowd of youngsters in the area.
- Find the function confusing.

5.3.5. The author's observation of the square

The observer can:

SEE	<ul style="list-style-type: none"> • parked cars, taxi stand, busses and bus shelters • some traffic, motorbikes, people with bikes • people passing by, people waiting for the bus (standing) • building in pale yellow, green and white • some buildings made of brick • shops with lots of street display • some greenery in the square • construction work in the square • some of the street Os allè • down the street Storgata • the Catholic church • the park with its greenery, the water fountain and the pavilion
HEAR	<ul style="list-style-type: none"> • the bus, some cars, bicycles and a motorbike • people talking in the street Storgata and the park • children playing in the park • wind blowing in the trees • birds • the water fountain
SMELL	<ul style="list-style-type: none"> • trees, flowers and grass • pollution from passing busses • food from "Pølse Ahlsen"
FEEL	<ul style="list-style-type: none"> • a place without identity • busy, people and traffic passing by • open, hard and "cold" • like a parking space

5.4. Busterud park

The park contains:

- Green areas
- Sitting area
- Playing area
- Activity area
- Relaxing area
- Viewing area
- Service area
- Meeting area

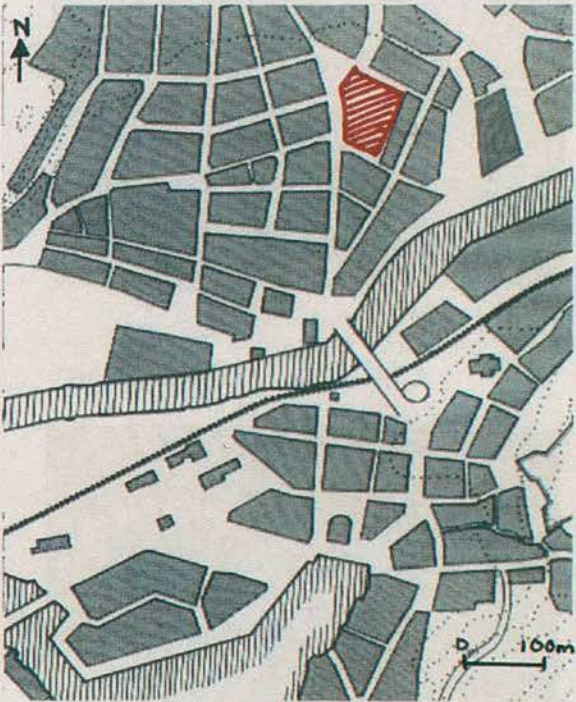
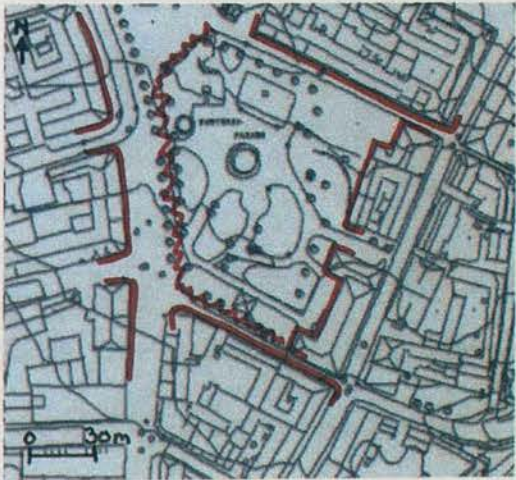
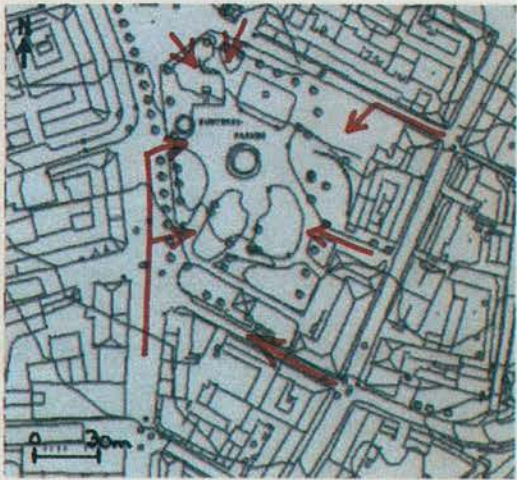


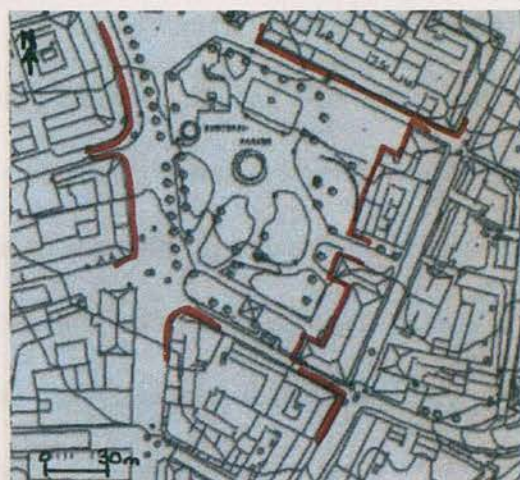
Figure 81. Location of the park.



Edges in the area



Access to the area



Pedestrian and car route

Listed buildings



Direction of view

Contrast of buildings, old (green) and new (red)

Figure 82. Space analysis of the space today.

The town park is probably the best preserved place in the inner centre today. The park has not changed much since it was laid out a hundred years ago. The lovely old bandstand still catches the eye, but unfortunately, it is not used in the manner of days gone by. This has to do with the town's economy. This park is still the most popular place in town, especially during the summer. Then people of all ages gather, just having a good time. Everywhere in the park, it is lined with white painted benches during the warm season. When all the benches are

occupied, people revert to using the lawn. An outdoor café stimulates sensory perceptions with smells of fresh coffee and hot waffles. We can also hear water cascading around the park's water fountain (the fountain was redeveloped a few years ago). It is now widely recognised that towns with "green areas" are more people-friendly, encouraging people to feel relaxed. The park is, unfortunately, the only green area in the town's inner centre. Another factor for its popularity is its handy location at the end of the main street. The park operates not just as an end point of the street, but more as a "break off point" of the street placed on the "sideline". That creates a perfect edge along the main street, especially for viewers.

If we take a look at a picture taken along the park edge, we find that it is lined up with the same white painted benches as the rest of the park.



Figure 83. The Busterud park.

These benches are always taken first. The reason for this is recognised by its location, along the edge with your back covered, giving one an anonymous feeling like a "people spotter". You are the viewer and at the same time not viewed. People using these benches have access to a nice view of what passes them by and what happens in the main street. It is not uncommon for people to sit

there, squeezed together for hours. Even on a hot summer's day, they are still very popular, because the great old trees provide shade, making the seats quite comfortable.

The architecture surrounding the park is of mixed texture and style. The style is a mix of French Empire style, Swiss style, traditional Fredrikshald style, Art Nouveau and the strong military style. The north part is mainly of timber and the usage is a mixture of shops, services and housing. The west, south and east side is quite different, mainly of rendered bricks and blocks, and the style is mainly of French Empire. These buildings were built in the glory days and many of them are clustered together, and form stylish, pure little neighbourhoods in the stunning French Empire style. Some buildings are marked by "historicism", especially the building called Søylegården located north-east of the park. This building was designed by the architect Grosch. Sadly, the back of the building is facing the park. The front faces Svenskegata. (See *Figure 18*.)

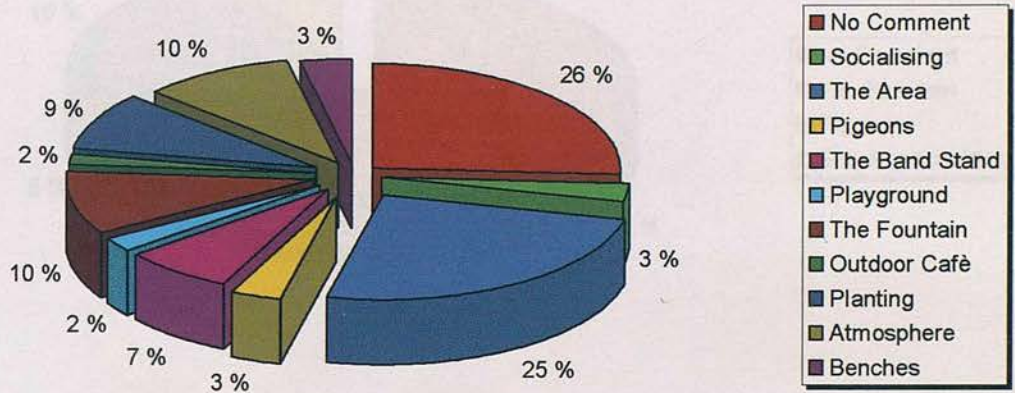
Further south from Søylegården, we find the town planning office's present location. This building is called Fayegården. Fayegården's earlier usage was as the town's library and before that, it was the old primary school for boys.

Returning to the picture, we find that the park is also surrounded by the new lamp posts that are influenced by the old gas lamps. At the front of the park, the ground is covered with a mixture of cobbles and flagstones. This is done to make the front a part of the pedestrian walkway. The rest of the park's walking area is still covered with sand and fine gravel just as it has been since it was developed.

The same 150 respondents were asked:

5.4.1. What do you like and dislike most about the Busterud park?

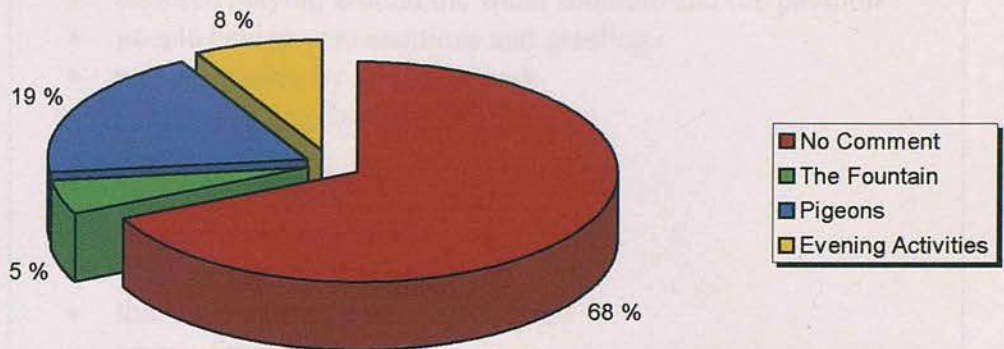
LIKE:



5.4.2. Single comments from inhabitants:

- Nice place for all ages.
- Like the relaxed atmosphere.
- Like the music played from the bandstand.
- Nice place, but can be improved.
- Like the green lung in the urban context.
- Like the surrounding architecture.
- Like the location of the park.
- Like the activities located in the park.

5.4.3. DISLIKE:



5.4.4. Single comments from inhabitants:

- The bandstand is not child-friendly.
- Too little activity in the park.
- Should work as a part of Storgata.
- Dusty in dry weather.
- Not enough sculptures and colours.
- The park is too small.
- Like to see more benches.

5.4.5. The author's observation of the park

The observer can:

SEE	<ul style="list-style-type: none"> • people playing and walking dogs • children playing around the water fountain and the pavilion • people having conversations and greetings • people passing by along the park • people walking through the park • the outdoor café • a mixture of people and age-groups • youngsters sitting on the grass • people enjoying themselves • that almost every bench is occupied • empty dirty benches • lots of trees and flowers • birds, mainly pigeons • some of Kristian V square • some of the street Storgata • buildings in pale grey, yellow, green and brown
HEAR	<ul style="list-style-type: none"> • the bus, some cars • people talking in the street Storgata and the park • people walking in the sand • children playing in the park • wind blowing in the trees • birds • the water fountain
SMELL	<ul style="list-style-type: none"> • trees, flowers and grass • food from "Pølse Ahlsen" • coffee and cakes from the outdoor café in the park
FEEL	<ul style="list-style-type: none"> • comfortable and relaxed • a nice atmosphere • safe

5.5. Storgata

Storgata contains:

- Shopping area
- Pedestrian walk
- Playing area
- Display area
- Activity area
- Viewing area
- Meeting area
- Service area
- Office area

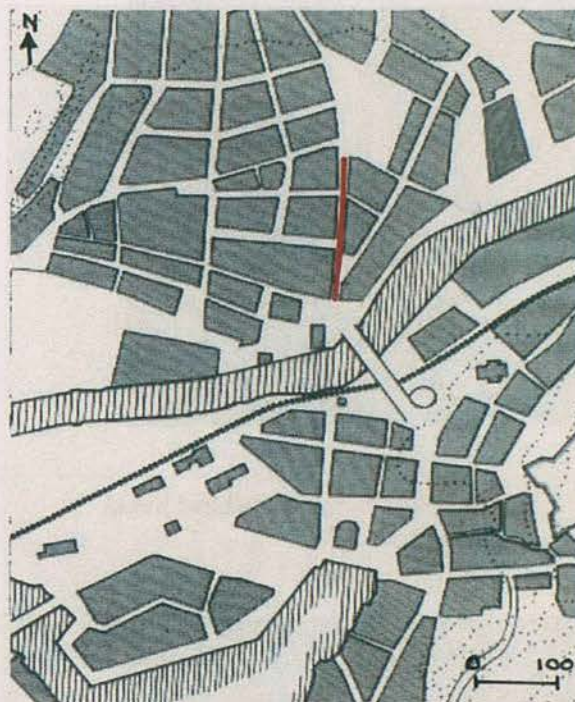
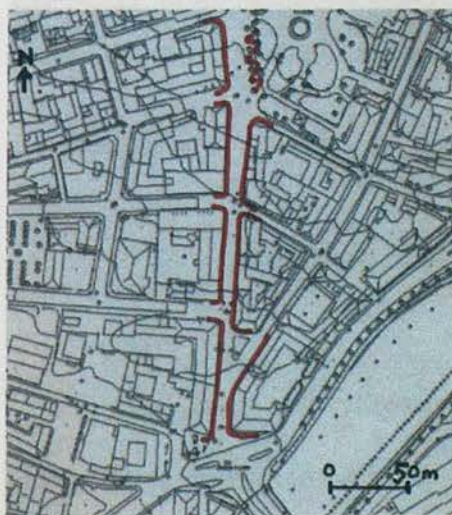
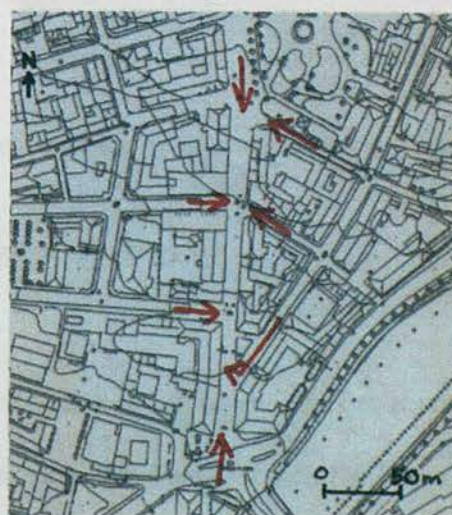


Figure 84. Location of the street.



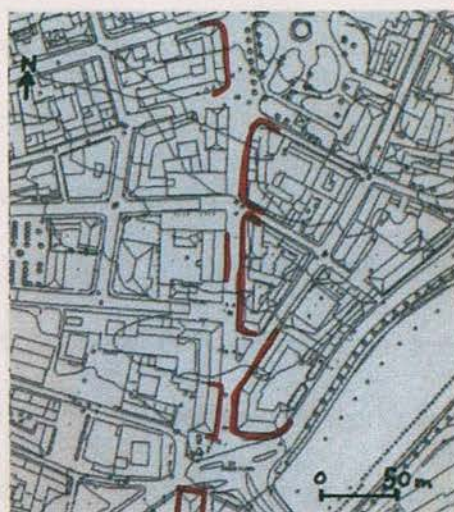
Edges in the area



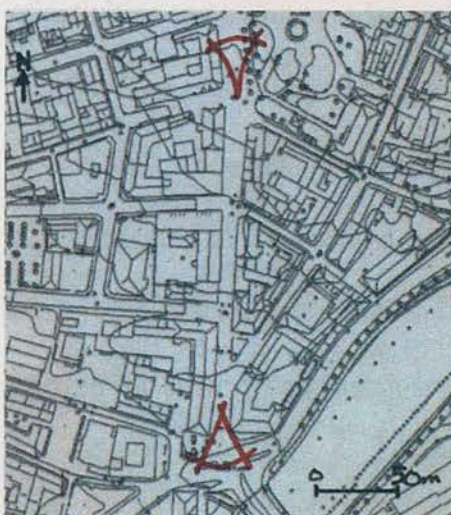
Access to the area



Pedestrian and car route



Listed buildings



Direction of view



Contrast of buildings, old (green) and new (red)

Figure 85. Space analysis of the space today.

Storgata is still categorised as the main street in the town. Before it was changed to a pedestrian walkway in the beginning of the 1980s, it was the busiest street in town. It was then covered with asphalt and contained raised pavements on each side. This changed again when the street was redeveloped as a pedestrian

walkway. The asphalt was removed and the cobbles underneath were redeveloped. The raised pavement was removed and the visual effect from the old days was back. The only problem was that the cobbles were not very efficient and practical. Shoes were damaged all the time and the stone was very slippery and difficult for elderly people to walk on. Therefore, the cobbles had to be reorganised. The cobbles still cover the street, but lanes of flagstones have been developed. This small change has really made a difference. The street works well today. Storgata is today the main shopping street, it is like a large market area. During the summer, several outdoor cafés can be found in the street. Goods from shops are commonly displayed in the street and it is also used for different types of activities and many parades, which can take place at any time of year.

The street is very people-friendly and provides the necessary security to have children around. Several small playgrounds that have been developed are also connected to the area. All this is very important to make the atmosphere in town more relaxed and comfortable. It is important that the town is used and enjoyed for other events than just shopping.



Figure 86. Storgata.

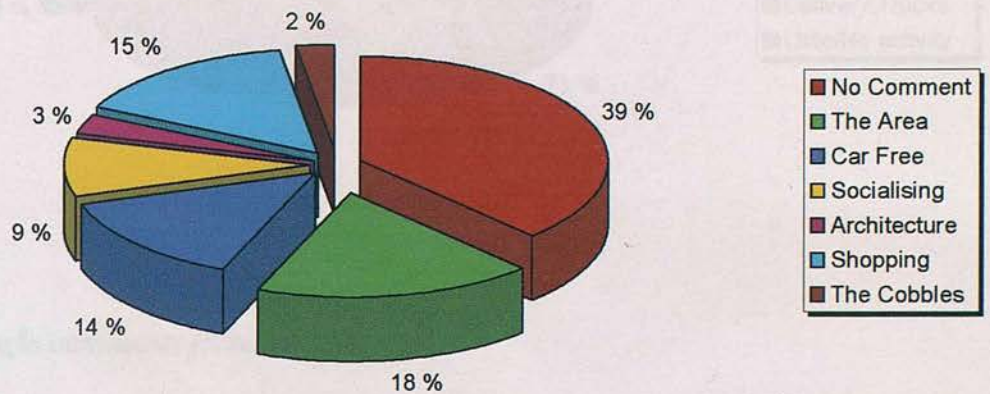
The architecture surrounding the street is a mixture of French Empire, traditional Fredrikshald style and postmodernist. The postmodernist style was introduced when an old building burned down and had to be demolished. Even if the postmodernist building has been squeezed in between the beloved Fredrikshald style, the street has not been destroyed. That probably has something to do with the great mixture of shapes, ornaments, textures and colours.

As a final touch, the old lamp posts are also adopted throughout the whole pedestrian area. At the end of the pedestrian street, we find Wiel's square, which in recent times, has changed completely.

The same 150 respondents were asked:

5.5.1. What do you like and dislike most about Storgata?

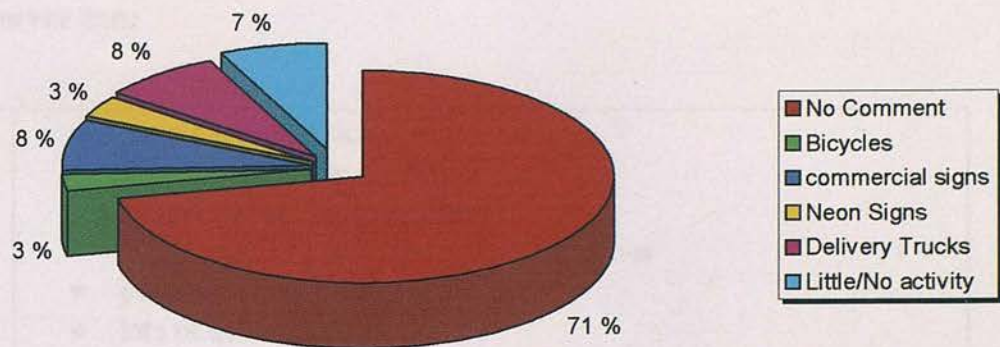
LIKE:



5.5.2. Single comments from inhabitants:

- Like the area especially on Saturdays.
- Nice and good variety of shops, but find it expensive.
- Nice place as long as the shops are open.
- Like the lighting during the winter.
- Like the outdoor cafés in the area.
- Like the activities in the street.
- Like the lamp posts.
- Like the wide and open street.

5.5.3. *DISLIKE:*



5.5.4. *Single comments from inhabitants:*

- Do not like the area.
- Do not like the emptiness.
- Do not like the Domus building.
- Do not like the buses.
- Do not like the constant maintenance in the street.
- The street is too short.
- Would like to see the street continue to the south side in a straight line.
- Like to see more benches.
- The shops are not good enough.
- Too many people.
- This is the only pedestrian walk.
- The street looks unfinished.
- Like to see more shops and fewer banks.
- The street is slippery during the winter.

5.5.5. *The author's observation of the street*

The observer can:

SEE	<ul style="list-style-type: none"> • people walking slowly • people passing by quickly • people having lunch outdoors • people meeting and having conversations • people on bikes, all ages • lots of street displays • lots of window displays and pennons • lots of nice buildings • some not so nice buildings, with a poor shop front • very little greenery • few occupied benches • some construction work
HEAR	<ul style="list-style-type: none"> • people having conversations • some music • distant noise from cars • sounds from the train and the railway station • children playing
SMELL	<ul style="list-style-type: none"> • food from different shops • coffee and cakes from the bakery
FEEL	<ul style="list-style-type: none"> • quiet and relaxed • comfortable • that some areas are crowded • that other areas have an emptiness

5.6. Wiel's square

The square contains:

- Busy car junction
- Sudden stop to the pedestrian walk
- Sitting area
- Viewing area
- Meeting area
- Modest greenery
- Service area
- Office area

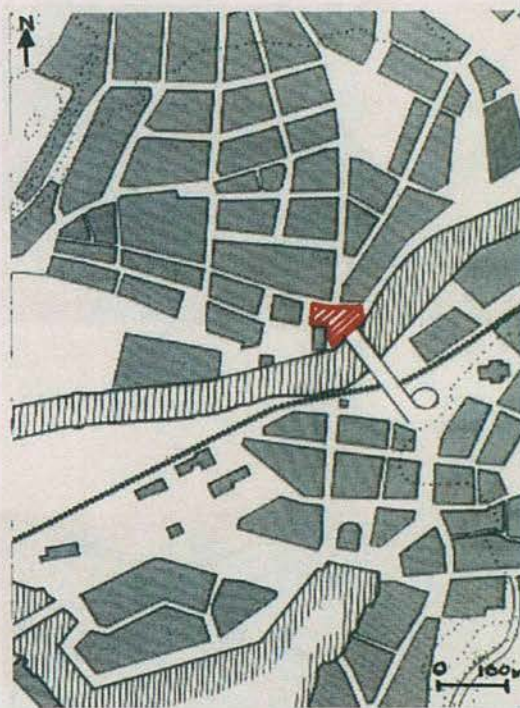
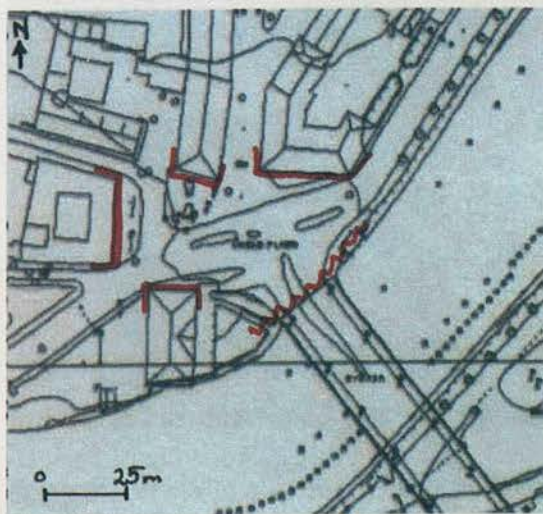
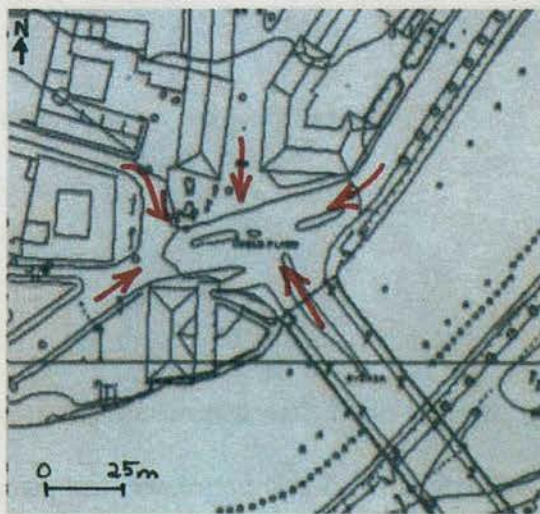


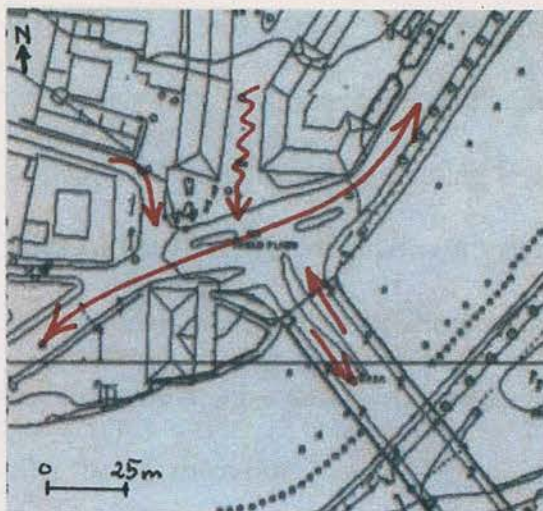
Figure 87. Location of the square.



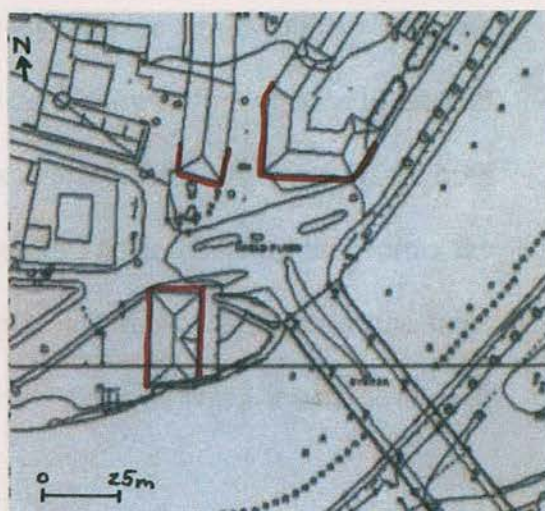
Edges in the area



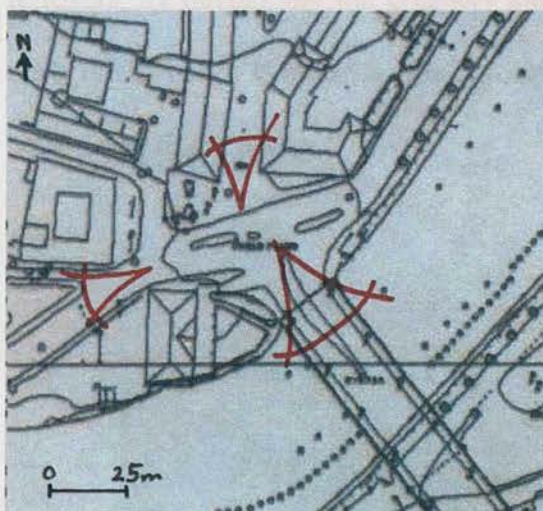
Access to the area



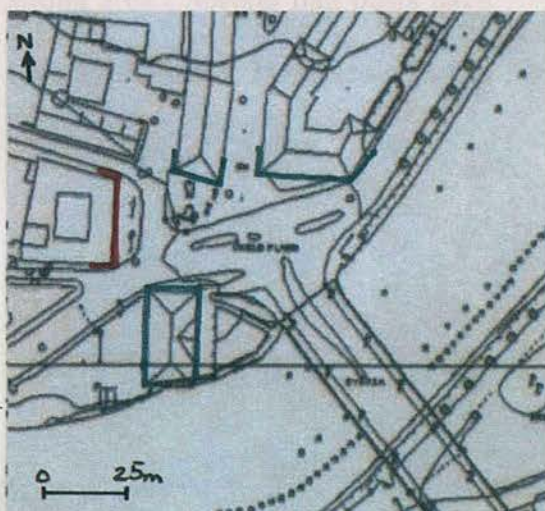
Pedestrian and car route



Listed buildings



Direction of view



Contrast of buildings, old (green) and new (red)

Figure 88. Space analysis of the space today.

Wiel's square is categorised as the most destroyed place in the town today. It has developed a brutal end to the newly developed pedestrian area in Storgata. This is also the reason why the town has developed two inner centres. The strong line down Storgata that continues on the other side of the river is broken. That happened, as mentioned before, when the old bridge was

demolished in the 1960s. The new four-lane bridge broke off the old line completely and transformed the square in to the busiest traffic junction in Østfold county.³⁴ With nine traffic crossing signals and the main street cut off on both sides of the river, the damage was extensive.³⁵ The architecture that forms the square today is a mixture of Empire and postmodernist. Apart from the bank building, the architecture is still very much the same as when it was developed after the last town fire.

Viewing a picture taken today, we find that there is very little space left for people. The local government has tried to create a public space from the leftovers, by developing the greenery and a sitting area. Several flag posts have been raised and a Christmas tree is located here every year. There are also old lamp posts found here.



Figure 89. Wiel's square.

³⁴ Jacobsen Frank Kiel, Halden før og nå, H Andersen Bok- og papirhandel AS, 1991. (p.93).

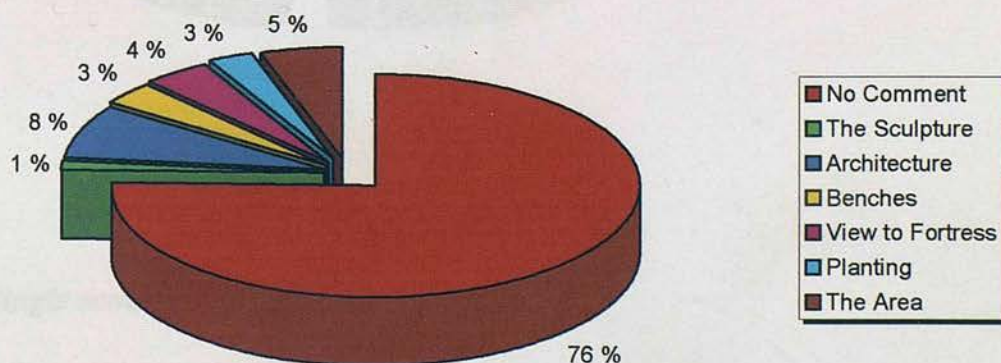
³⁵ Norsk Arkitekturforlag, Byggekunst, "Wiels plass i slutten av september", an article by Ulf Grønvold, Halden et byportrett, 8/1991. (p.470).

From all of this, we see that a great effort has been made by the local planning office, but the problem is that the space is poorly utilised. The main reason is probably the noise, the smell and view of the busiest traffic point in the county. Wiel's square is categorised as one of the most important squares in the inner centre. The reason for this statement is that Wiel's square is the only square in the inner centre that gives people a clear view of the beautiful fortress. This is important for significant fireworks are set off from the fortress on every important occasion in Halden and Norway.

The same 150 respondents were asked:

5.6.1. What do you like and dislike most about Wiel's square?

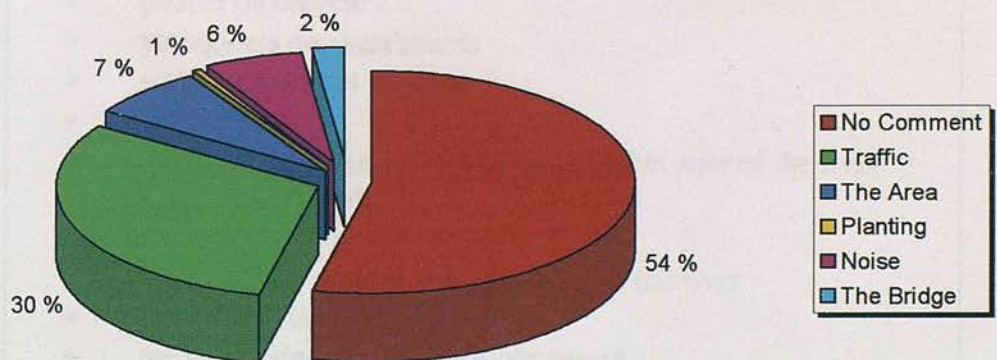
LIKE:



5.6.2. *Single comments from inhabitants:*

- Like the view to the river and the fortress.
- Looks like a small oasis in the town.
- Like the crossing signals.
- Like the plans for the new pedestrian bridge.
- Like the central location.

5.6.3. *DISLIKE:*



5.6.4. *Single comments from inhabitants:*

- Too noisy.
- Confusing area.
- The area has been effectively destroyed.
- Want a better connection to the south.
- Kongegården needs to be repaired.
- Do not like the style of the Sparebank building.

- There are not enough pedestrian crossings.
- Do not like the town bridge.
- Want the old square back.

5.6.5. The author's observation of the square

The observer can:

SEE	<ul style="list-style-type: none"> • great view of the fortress • lots of cars • people passing by • some people sitting on benches • people on bicycle • youngsters on skateboards • some greenery in the area • busy crossing • the church between the trees on the other side of the river • construction work • some of the river • the industrial area on the other side of the river • old architecture in pale colours • the mountains around the inner centre
HEAR	<ul style="list-style-type: none"> • lots of noise from large lorries, buses and cars • noise from the construction work • people having conversations in a high voice • skateboards
SMELL	<ul style="list-style-type: none"> • pollution from the heavy traffic • the river
FEEL	<ul style="list-style-type: none"> • the business • the unpleasant noise • uncomfortable

5.7. The market

The market contains:

- Market area
- Shopping area
- Activity area
- Parking area
- Meeting area
- Service area
- Office area
- Viewing area

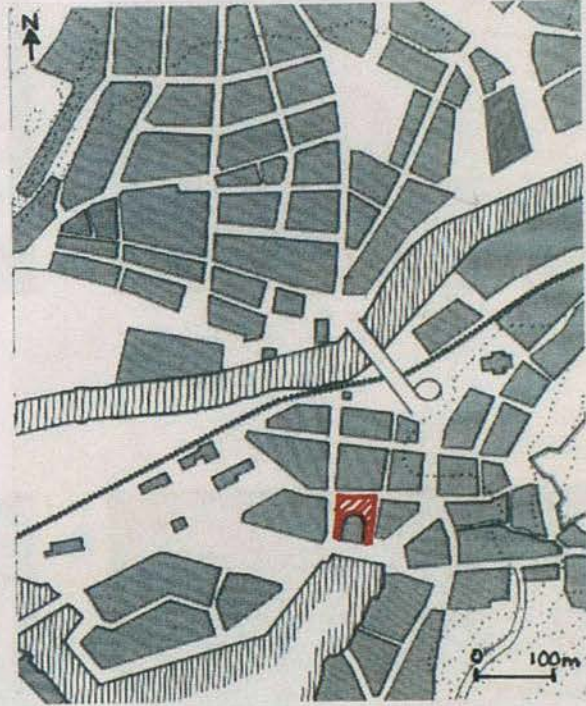
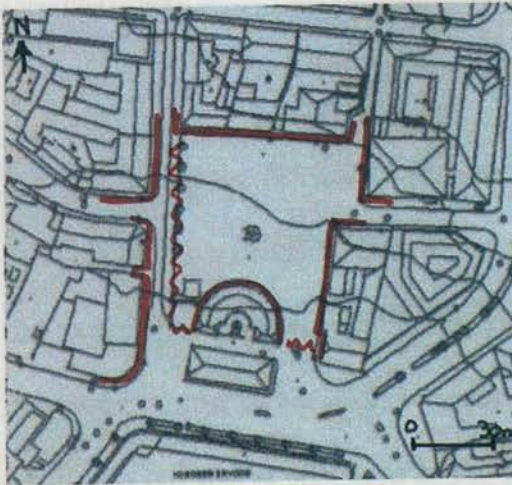
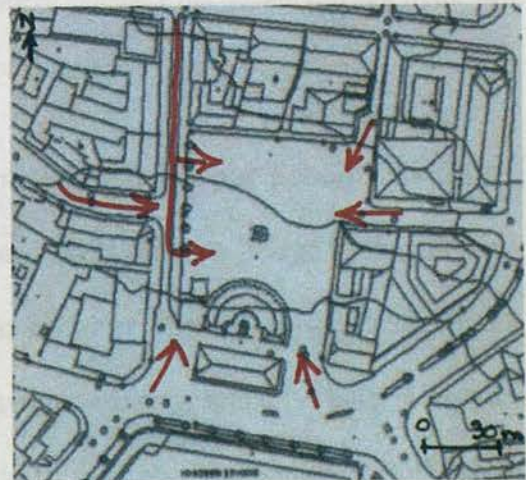


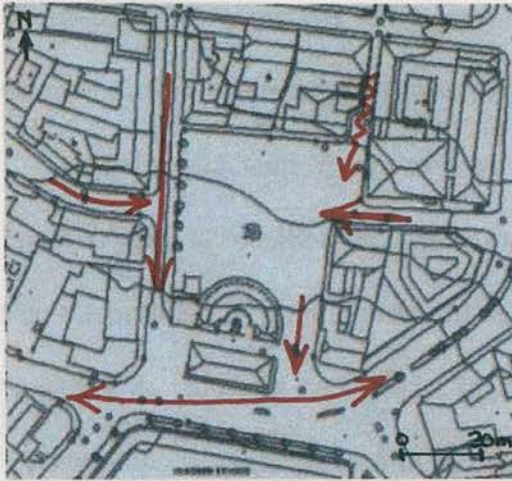
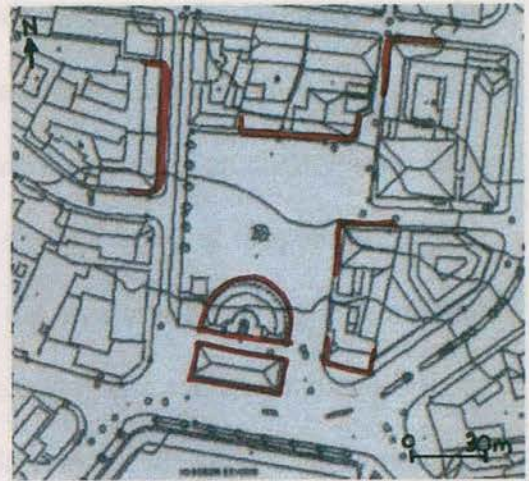
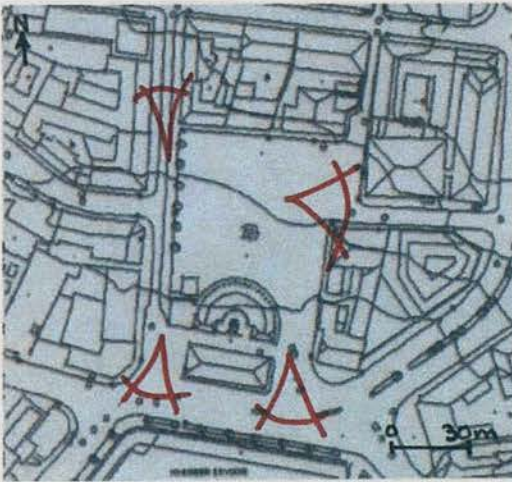
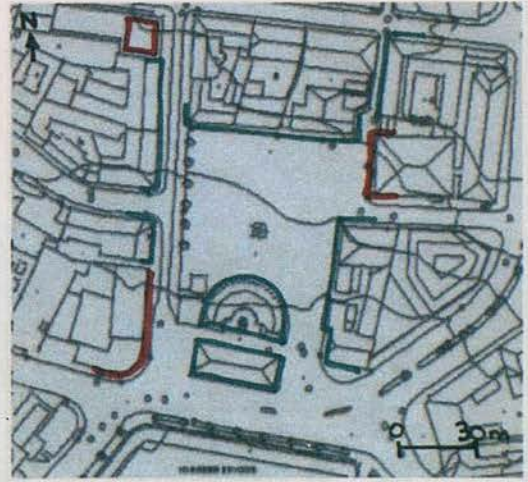
Figure 90. Location of the market.



Edges in the area



Access to the area

*Pedestrian and car route**Listed buildings**Direction of view**Contrast of buildings, old (green) and new (red)**Figure 91. Space analysis of the space "today".*

Before the old town bridge was demolished, it was just a short walk from Storgata on the north side to the town market. Since the new bridge broke off the old axis, it has made the walk longer. That could be one reason why usage has decreased. Most of the market today is used as parking space. There is just a small part left that is still used as the traditional market. The market is still used

for special events, marked every year by festivals and special Halden events, for example, it is the main meeting point after the 17th of May parade.

The architecture surrounding the market is very much the same as a hundred years ago, with a few exceptions. If we take a look at the picture, we find that the building located in the north-east of the market is new. The old building was built in 1879 and contained a painting shop, florist and a manufacture shop. This building was demolished in 1977 to make way for the new bank. Originally, the building was designed differently but it was decided that the area could not cope with the new modern shapes so new designs were made to fit the surrounding Empire/military architecture.

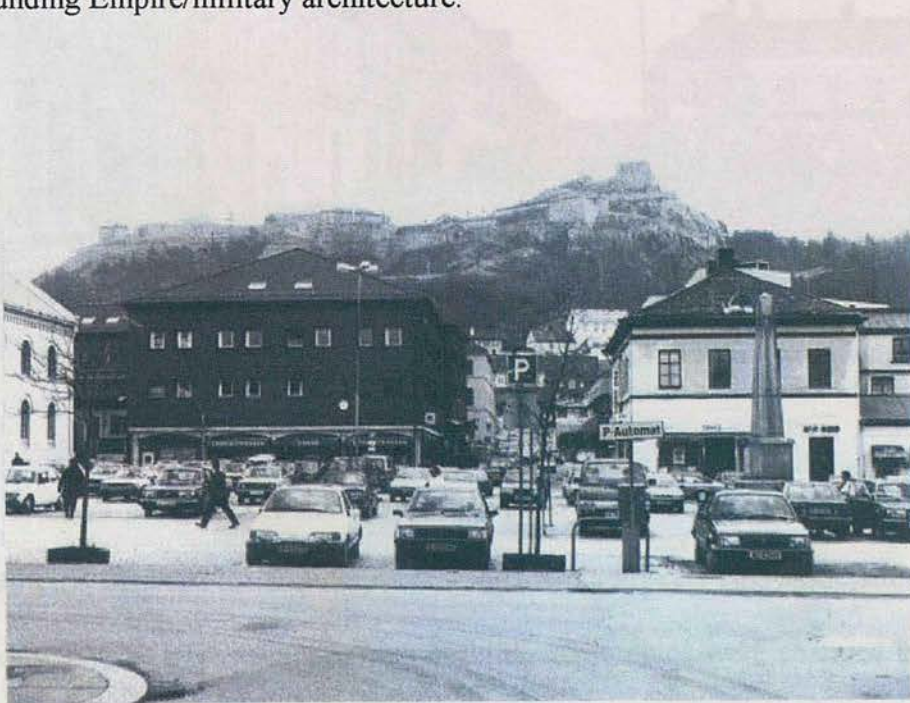


Figure 92. The market. (photo: Halden før og nå)

Another building that was severely altered is the old Sørensenegården, which had a garden towards the inner harbour. Looking at a picture taken in 1915, we find the Sørensenegården on the left-hand side. It was a two-storey, high timber building. The last person in the Sørensen family who owned the building

was General Major Wilem Sørensen, who was a commandant at the Fredriksten fortress from 1906 to 1907. The building had several owners after 1892, but the last owner bought the building at the end of 1950s. Sørensengården was then demolished to make way for the town's local newspaper (Halden Arbeiderblad).



Figure 93. The Sørensengården 1915. (photo: Halden før og nå)

Great plans for the site were developed. It was originally planned to be a co-operation between the newspaper and the town's Folkets Hus association. The plan was to raise a seven-storey high building. The plans were changed because of the two party's different interests. The newspaper raised a building on the site and moved in on 14. December 1959.³⁶

³⁶ Jacobsen Frank Kiel, Halden før og nå, H Andersen Bok- og papirhandel AS, 1991. (pp. 24-25)



Figure 94. The Halden Arbeiderblad building in 1991. (photo: Halden før og nå)

In a picture taken in 1991 (above) we find that the architecture changed dramatically, both in shape and texture. This was considered to be a modern and functional building during the late 1950s. The building managed to maintain the right building height compared to the surrounding buildings. But the level line is broken, because the ceiling height is lower in the new building, so four storeys compete with three. The frontal facade has also changed completely. The visual appearance of the new building is marked by horizontal layers of glazing, compared to surrounding buildings that have vertical glazing. The flat roof that was very modern and typical at the time, does not make it any less different. Even the texture and the colours are in stark contrast to the surrounding buildings, which are mainly the original ones, with some exceptions to their fronts.

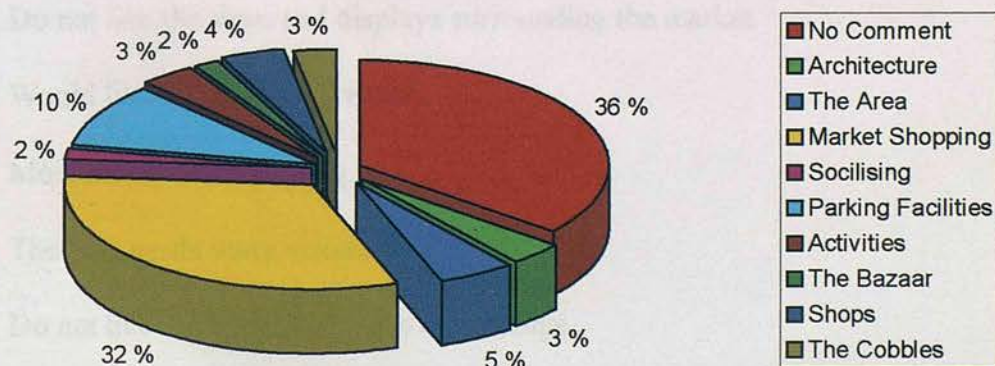
Some facades were transformed to broader and more modern shop fronts. If we compare the picture taken in 1890 (see *Figure 58*) and the one taken in 1991 (see *Figure 94*) we find that colour and texture is still very much the same and the cobbles still cover the market space. Some new trees have been planted. This gives a 'softening' effect against the hard surface of today. The bazaar that

defines the boundary between the town market and the inner harbour still catches the eye. The bazaar was renovated some years ago and one can now find shops like a florist, fishmonger and fast-food outlets. It is nice to see that the bazaar still provides traditional market trade. Apart from the two new buildings, the market has managed to keep the old historical buildings that are very important for the town's landscape today.

The same 150 respondents were asked:

5.7.1. What do you like and dislike most about the market?

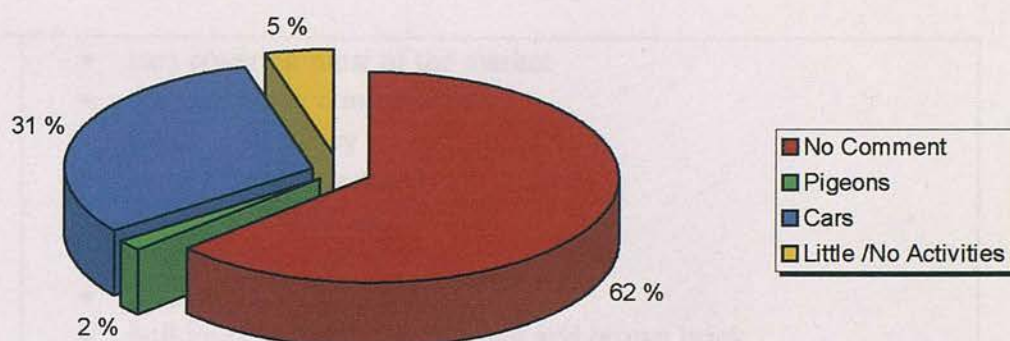
LIKE:



5.7.2. Single comments from inhabitants:

- Like the new greenery.
- Like the potential opportunities for the future.
- Find it colourful.

5.7.3. *DISLIKE:*



5.7.4. *Single comments from inhabitants:*

- Do not like the signs and displays surrounding the market.
- Would like to see more greenery.
- More market, less parking.
- The area needs more maintenance.
- Do not like too many teenagers in evenings.
- Looks boring and empty.
- The area is in need of a parking house.
- Do not like the new buildings surrounding the market.
- Do not like the cobbles.
- Do not like the market shopping.

5.7.5. The author's observation of the market

The observer can:

SEE	<ul style="list-style-type: none">• cars covering most of the market• people having conversations• people passing by• people eating ice-cream• people of mixed ages• some of the inner harbour• nice pavilion• buildings in pale yellow, white and brown brick• poor shop fronts• motorbikes• birds, mainly pigeons and sea-gulls• some greenery
HEAR	<ul style="list-style-type: none">• the buses, lorries, some cars, and a motorbike• people talking• very loud music from some cars• birds
SMELL	<ul style="list-style-type: none">• food• pollution from the cars in the market• the sea• flowers
FEEL	<ul style="list-style-type: none">• that the market is overcrowded with cars• the hardness• comfortable with all the people around• the "coldness"• relaxed• like a parking space

5.8. Inner harbour

The harbour contains:

- Lodging for small boats
- Activity area
- Meeting area
- Sitting area
- Walking area
- Tourist facilities area
- Viewing area
- Service area
- Housing area
- Shopping area
- Office area

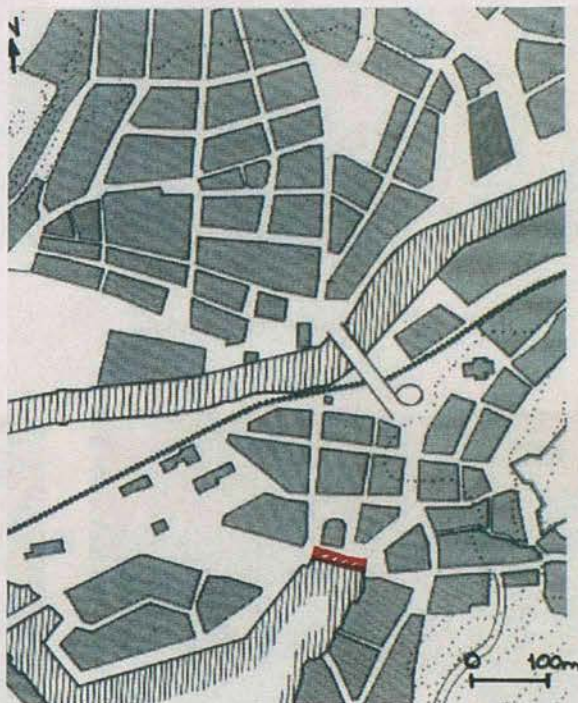
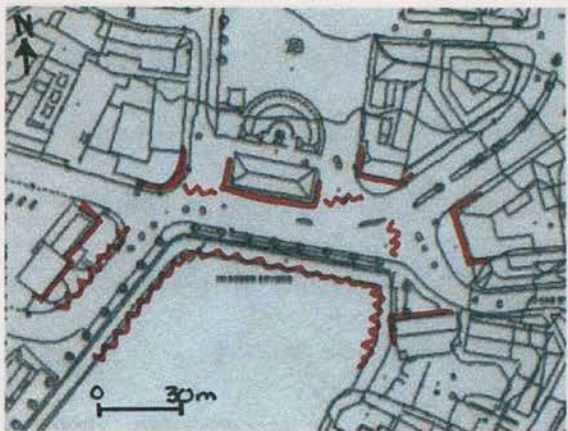
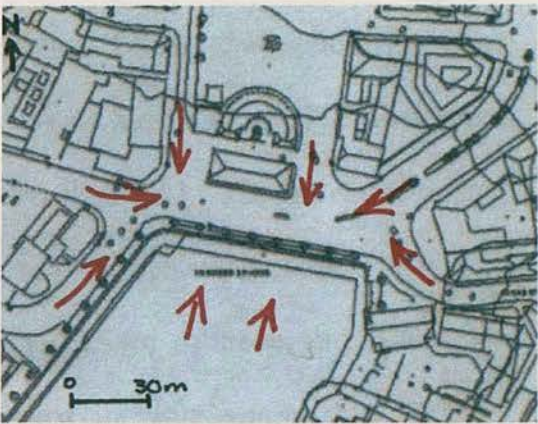


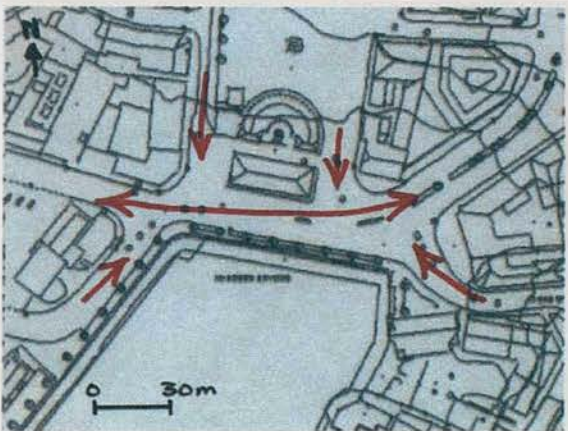
Figure 95. Location of the harbour.



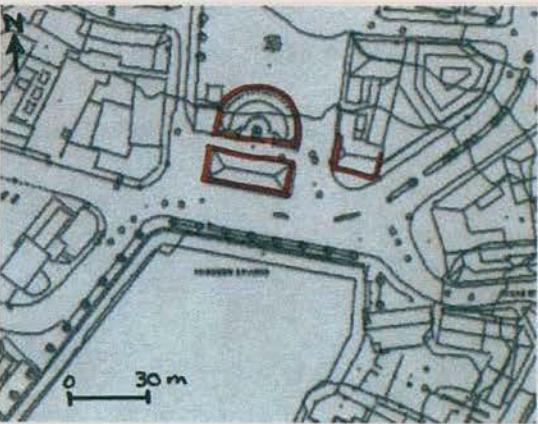
Edges in the area



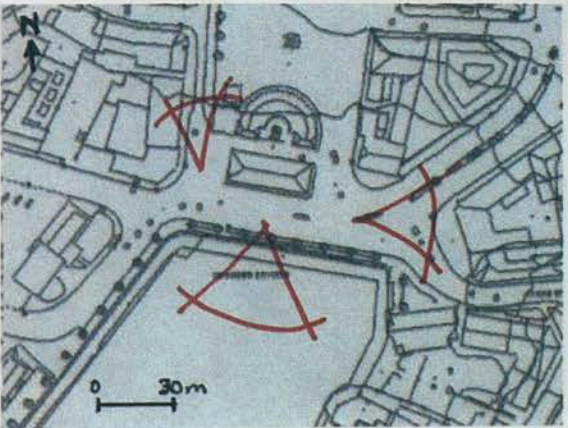
Access to the area



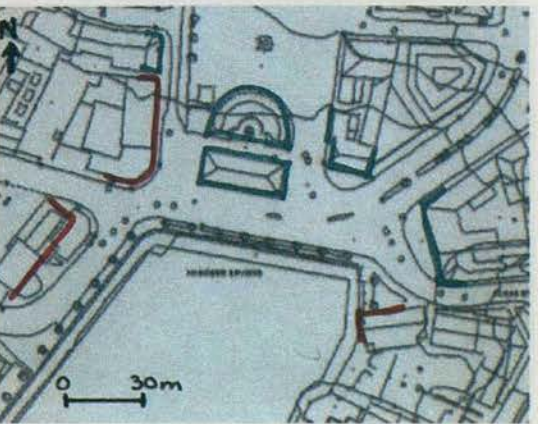
Pedestrian and car route



Listed buildings



Direction of view



Contrast of buildings, old (green) and new (red)

Figure 96. Space analysis of the space “today”.

The inner harbour is today characterised as a seasonal area, utilised mostly during the spring and summer seasons. During this period, the inner harbour is crowded with a large range of different types of boats. Halden harbour won the best guest harbour in the country award in 1993. The developer behind its success is the harbour manager and also the town's planning office.

A pedestrian walk has been developed closer to the water. Along this walk, one can find a great number of seats that are quite comfortable. The old harbour edge now forms a back boundary for the benches and the walk. The edge is also planted with different types of plants to make a boundary between the busy vehicular road and the sitting area. This type of boundary has a great visual effect, but it does not stop the noise. Several floating landing-stages have also been developed to be able to cope with more guests.



Figure 97. The inner harbour. (photo: Halden guide, 95)

The main reason the guest harbour won the award is the great amount of facilities provided for the guests that have been developed on the premises. These are important facilities such as toilets, showers, tourist information, fuel and fresh water. One can also find a large range of cafes, restaurants and pubs around the harbour area.

If we look at a picture taken in 1955 (Figure 98), we find that to some extent, this also was the case during the 1950s. In the picture we can see the old outdoor cafe called “Sjøbris” (Seabreeze) that was very popular as soon as the weather allowed. “Sjøbris” was built on the edge of the harbour along a walkway lined with trees that defined the boundary between the street and the great view of the inner harbour basin.



Figure 98. The “Sjøbris” 1955. (photo: Halden før og nå)

Sadly, “Sjøbris” and the paved area lined with trees was demolished in the 1960s to make way for the new four-lane road that was designed in connection

with the new town bridge.³⁷ If we compare the old picture with a picture taken from the same spot in 1991, we find the same picturesque view. The view is marked by the same great harbour, with a part of the town below, and the beautiful profile of the fortress floating above.

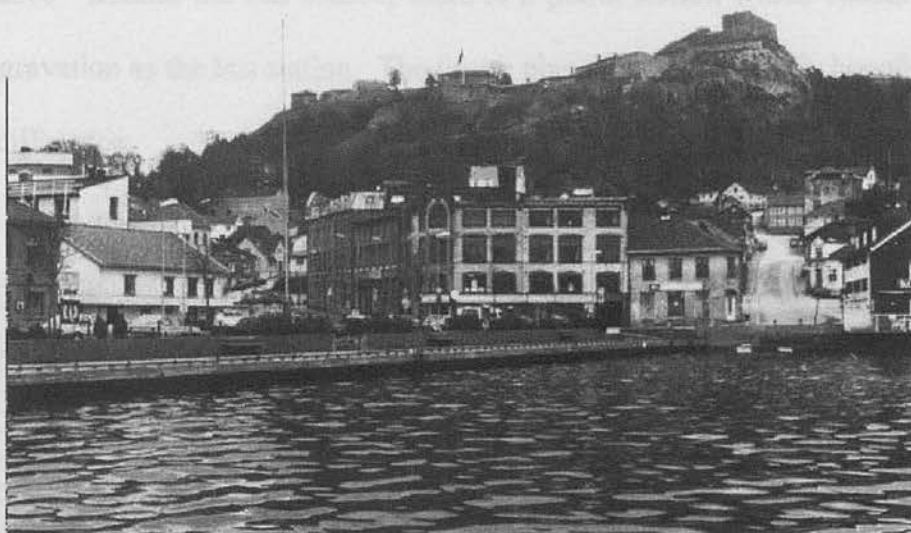


Figure 99. The inner harbour in 1991. (photo: Halden før og nå)

However, the new picture shows how stark the harbour has become. It has lost its great enclosed identity that was so beloved. Even if the harbour is not what it once was, those behind the renovation have to be congratulated for their effort and achievement. Who would believe that just ten years ago serious plans were developed to fill in the whole inner harbour basin to accommodate vehicles.³⁸

Since the renovation of the harbour, several housing developments have been raised on the site which were earlier crowded with old storage buildings. This has now been developed as a popular area to visit and in which to live. The

³⁷ Jacobsen Frank Kiel, *Halden før og nå*, H Andersen Bok- og papirhandel AS, 1991. (pp. 16-17)

³⁸ Jacobsen Frank Kiel, *Halden før og nå*, H Andersen Bok- og papirhandel AS, 1991. (pp. 16- 17). For more information about the subject see both Miljøverndepartementet, *Stedsanalyse-eksempel Halden*, 1993 (p. 11) and The Norwegian Road Plan II at the local government.

only area left as an annoyance and aggravation is the town's bus station, finished in 1959. If we look at a picture taken today, we find that the architecture is very much the same as the building across the road, the newspaper building. They were designed in the same period, so that is probably the reason for the resemblance. Behind the bus station, there is a petrol station which causes the same aggravation as the bus station. The future plans for this area will, hopefully, make a difference.



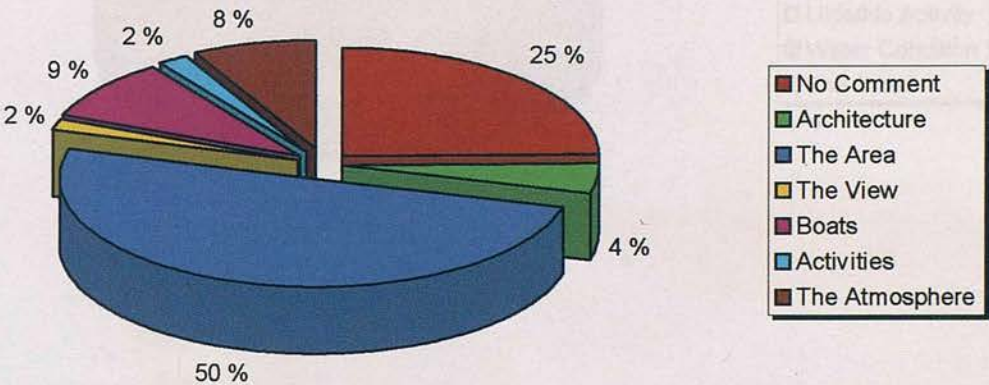
Figure 100. View over the bus station. (photo: NSB)

The old bus station will be moved to the train station to develop a new transport interchange in the town. There are also plans to move the petrol station to make way for a hotel that is planned to occupy this area. This hotel is planned as a feature along the waterfront and will contain facilities like restaurants, cafes and pubs, and these will also operate outdoor, around the hotel. This part of the town is recognised as having the town's best options for a buoyant night life.

The same 150 respondents were asked:

5.8.1. What do you like and dislike most about the inner harbour?

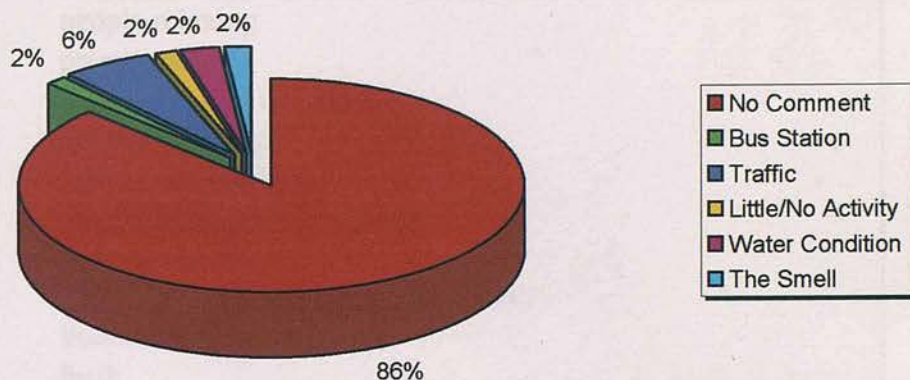
LIKE:



5.8.2. Single comments from inhabitants:

- This is the town's pearl.
- Nice area for relaxation.
- Like the feature of water contrasting with the land.
- Nice area for walking.
- It is a beautiful area.
- Great guest harbour.

5.8.3. DISLIKE:



5.8.4. Single comments from inhabitants:

- Needs more seats.
- Do not like the greenery.
- Not child-friendly.
- The walk route is too short.
- Needs more activity.
- Do not like the busy road close to the harbour.
- Noisy.
- Do not like the industrial area.

5.8.5. The author's observation of the harbour

The observer can:

SEE	<ul style="list-style-type: none"> • people relaxing • people eating • people feeding the birds • people with dogs • people passing by • people having conversations • some greenery • the water with some floating rubbish • boats • birds • buildings with mixed colours, yellow and red dominate • heavy traffic passing by • buildings that need renovation • great view of the inner harbour and the fortress
HEAR	<ul style="list-style-type: none"> • people talking • the water • the birds • the noise from the traffic
SMELL	<ul style="list-style-type: none"> • the water • gasoline • pollution from the cars
FEEL	<ul style="list-style-type: none"> • comfortable • relaxed • the noise from the traffic

5.9. Train station market

The market contains:

- Taxi stand
- Parking space
- Meeting area

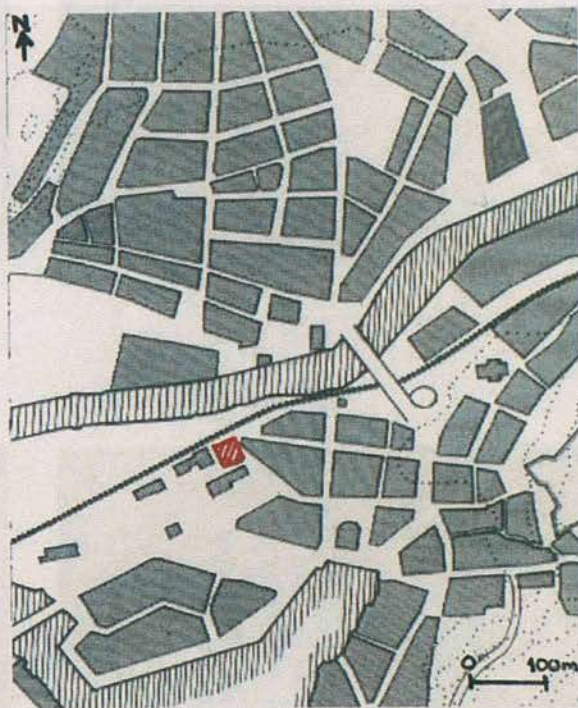
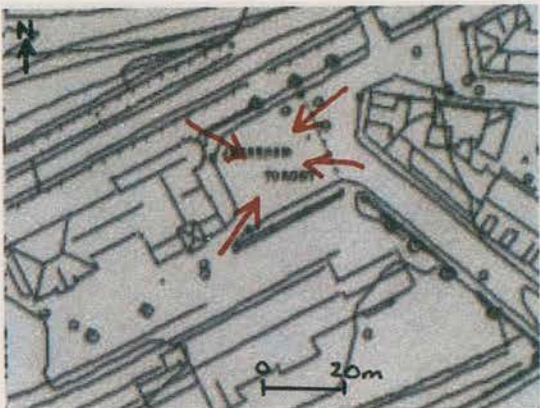
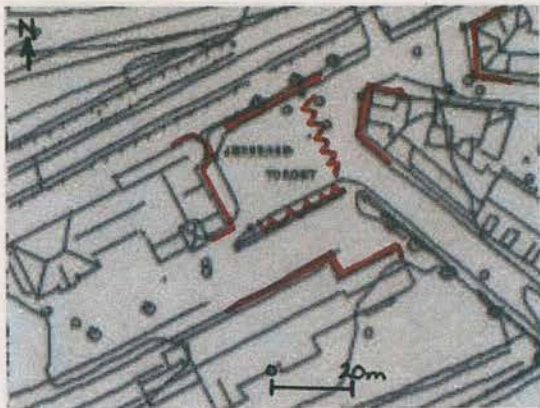
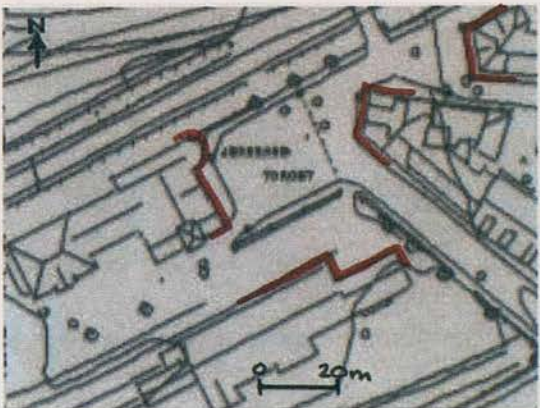
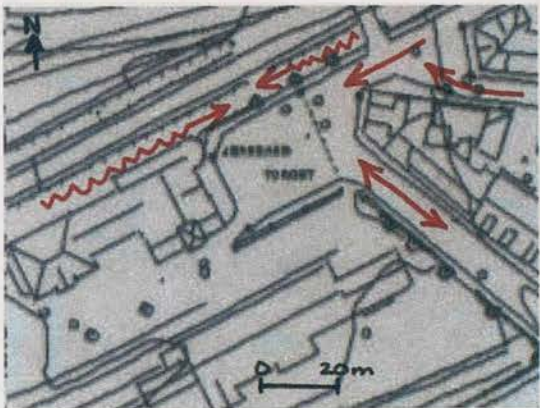


Figure 101. Location of the market.



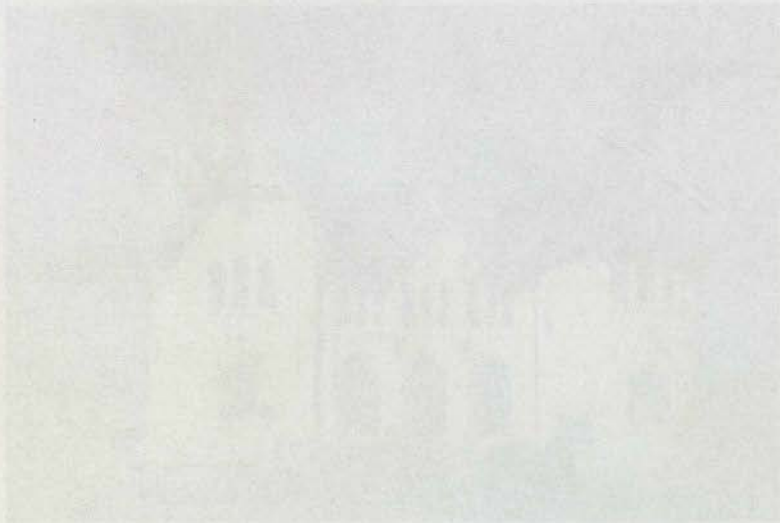
Edges in the area

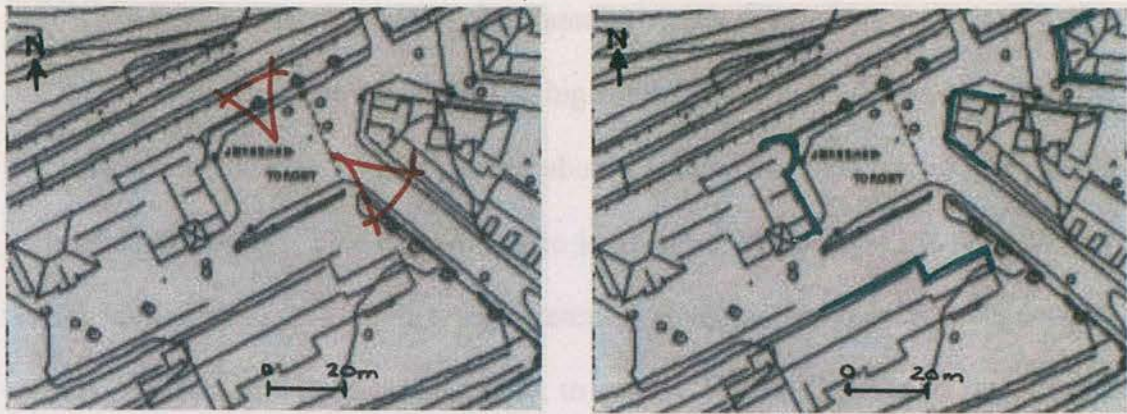
Access to the area



Pedestrian and car route

Listed buildings





Direction of view

Contrast of buildings, old (green) and new (red)

Figure 102. Space analysis of the space “today”.

This area has hardly changed at all during the last hundred years. The Grand Hotel is mainly the same except for some changes in the elevation and some alteration at roof level. We also find that the great roof above the platform is gone. The market’s only purpose today is its usage as a drop-off and pick-up point. Even if the area has not changed much in the last decade, the change has yet to come.



Figure 103. The train station.

5.9.1. Planned transformation of the station area

With the new plans for the high-speed train link, the whole area will change dramatically. Today there are about 13 trains that pass through the town's train station daily. This is predicted to increase to 300% when the new railway link is finished.³⁹ The whole town's transport system is also planned to be located in connection with the railway station, to make a combined transport interchange centre. If we take a closer look at the transport system today, it is spread around on the south side. The idea is now to concentrate buses, taxis and railway into one recognised area.⁴⁰ The taxi station is today located close to the town bridge and the bus station close to the inner harbour area. To be able to create a good transport interchange centre that will work well for the town's scenery, people and the area provided, other criteria are needed.⁴¹

Criteria:

- Good link between the transport interchange in the area.
- Easy to reach by vehicle and pedestrians.
- Central location
- Within easy reach of industry and business.
- Must be easy to use.
- Must be accessible to boats.
- Design a development that has a pleasant balance between new and old architecture.

³⁹ This information is from an interview by the author with NSB Oslo (Norwegian Railway Company) Main Office and their representative, Erik Milde.

⁴⁰ For more extensive details see the local "Utfoming av de enkelte delområdene", Sentrumsplan Halden, Tekstidel, 1996 (p. 65)

⁴¹ The criteria was determined after several meetings with the local planning office and NSB Oslo.

- Let the transport interchange centre be the first step to further development of surrounding areas.
- The transport centre should be amenable to future development.
- It is also important that the old and extravagant railway station is maintained as a monument and recognised as part of the town's scenery.
- Must create a nice impression of the town. A transport interchange centre usually gives the first impression of the town to the traveller.

5.9.2. Norwegian Railway Company's plans for the area

NSB (Norwegian Railway Company) decided to develop two solutions to the problem that occurs when planning a railway link through a small town like Halden. One solution was to develop the new railway on the north side. By moving the railway station from the south to the north side, the transport interchange was located closer to the main inner centre. It would then be easier for most people to reach the transport centre. Halden authorities were not satisfied with this solution, and expressed that this was in conflict with their interest. Several objections were made about this solution. One was that if they were to consider two possible solutions, one on the north side and one on the south, the future development will stop on both sides for several years. Halden authorities then made a decision that several solutions for the south side were accepted only.

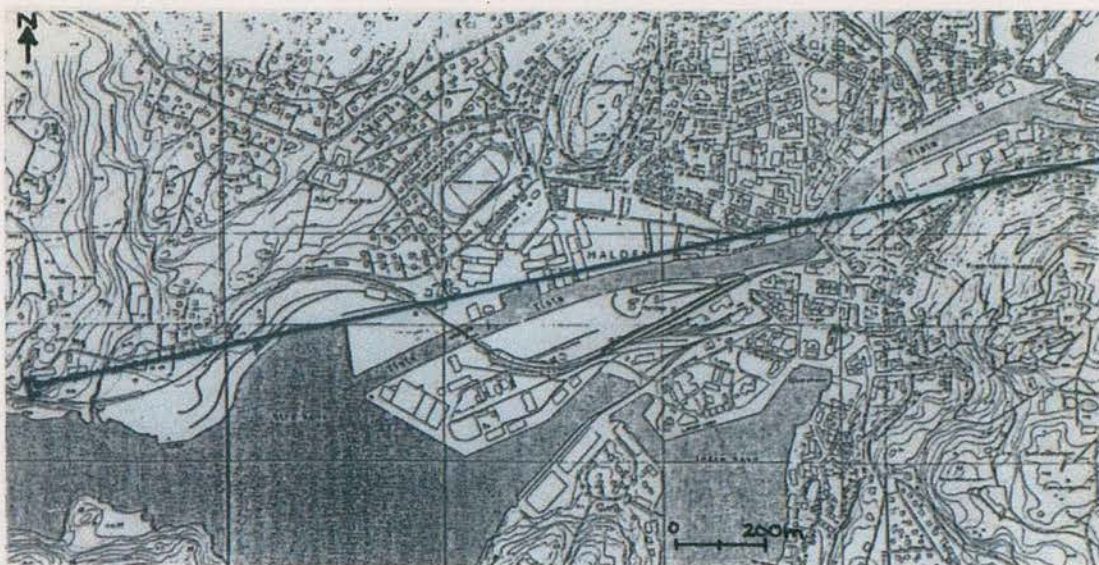


Figure 104. The north side railway line.

One reason for not accepting the north side solution is that the railway has to cross the river Tista twice before it leaves town. One bridge would have to be built from Refnedalen over to Høvleriet, and then the railway would follow the river on the north side. On the east side of the town a further new railway bridge has to be built. This crossing would happen in a very valuable and sensitive part of the town. Therefore, this solution is not acceptable for the town.

The only acceptable solution is the south side, where the old railway station is located today. NSB's solution for the south side has also created a few problems, especially for the future road system. Since the railway has to be as straight as possible, the new road system has to be designed after a decision is made for the railway. This is a possible conflict between NSB and Halden authorities, since NSB's concern is the railway only and Halden authorities concern is what this will do to the town.

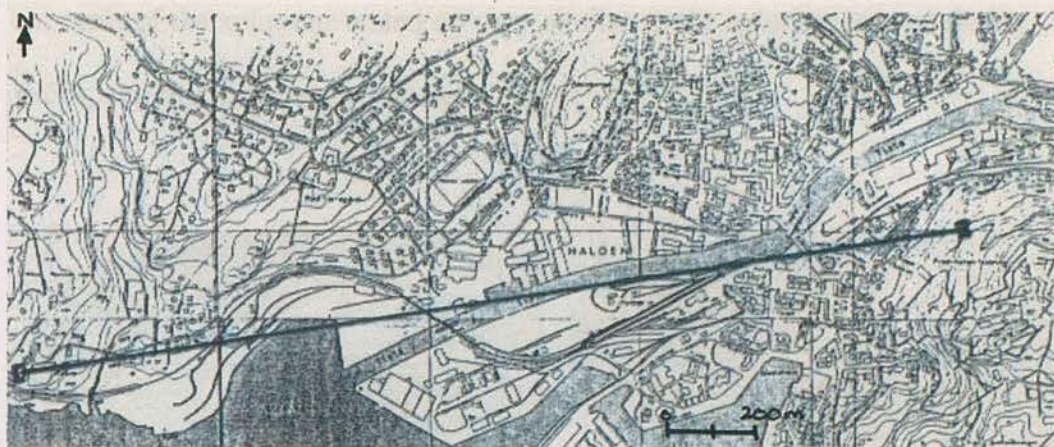


Figure 105. The south side railway line.

One of the problems arising from NSB's solution for the south side, is that two railway bridges still have to be built. They suggest developing a tunnel below the housing area at Refne, over to Høvleriet as in the solution for the north side. Then the railway crosses the river by a new bridge so the railway can follow the river along Mølen on the south side.⁴² This is a solution that can work, but the problem that worries the Halden authorities is that the last bridge crosses the river length-wise. This is not acceptable because it will cover a large part of the river and riverside.

Halden's solution is to take the railway from the old railway line below Refne and then take it direct over to Mølen on the south side with just one bridge. With a crossing of just 300m, it seems to be a sensible solution. Hence, with very poor ground conditions along the mouth of the river, the technical/economic problems are too great for NSB to accept.

NSB and Halden planning office then tried to solve the road system from NSB's railway solution on the south side. Several ideas were drawn up on paper,

⁴² An article written by Torgeir Nakken in the local newspaper, Halden Arbeiderblad, *NSB- sjefen velger sydsiden*, 11 Jan. 1996 (pp. 16-17)

but most of the solutions ended up very similar to the solution created during the 1960s, and that was not a good sign.

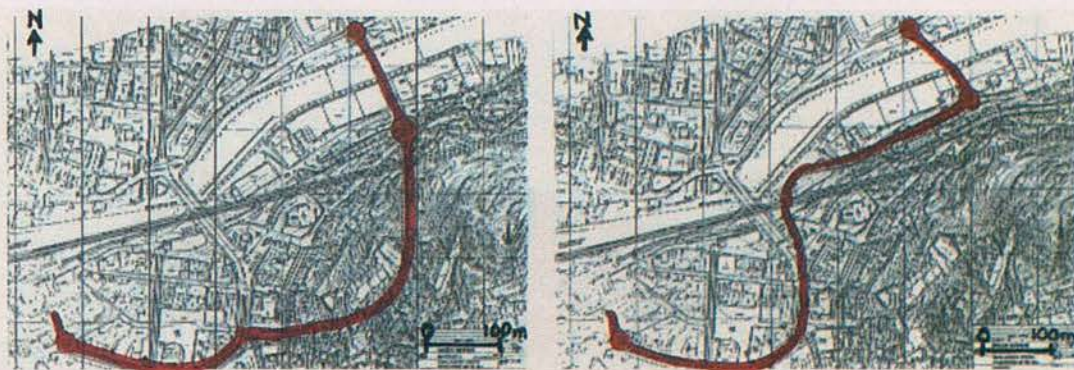


Figure 106. Different solutions for new road systems. (Illustration: Halden teknisk etat)

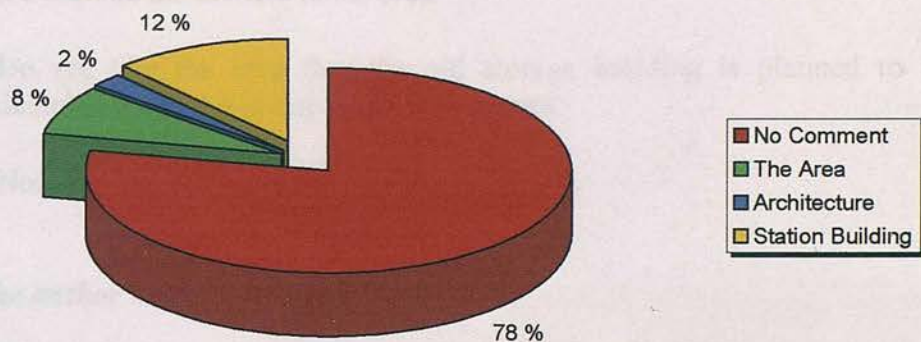
The subject is still open for discussion, but some decision has to be agreed between NSB and Halden.⁴³ This will be discussed later. Whatever the result, it will be a change on an enormous scale. This will also concern the area on the opposite side of the river from the railway station, where we find the old fish-market.

⁴³ For more information see, Ramfløy Wenche, "The third solution", Transformation created by a high speed train link, Halden Norway, Diploma in Architecture, Heriot Watt University ECA Library, 1995 (pp24-33)

The same 150 respondents were asked:

5.9.3. What do you like and dislike most about the train station area?

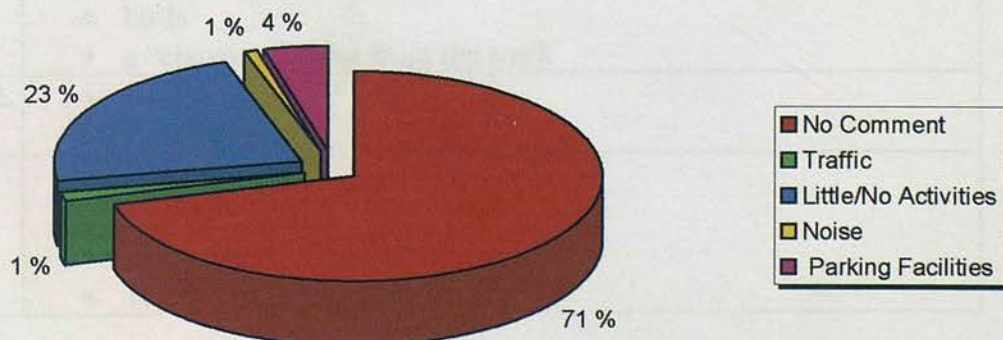
LIKE:



5.9.4. Single comments from inhabitants:

- Like the definition of the area.
- Like the old trees.

5.9.5. DISLIKE:



5.9.6. *Single comments from inhabitants:*

- Too small and badly utilised.
- Miss the flowers and benches.
- Do not like the fence.
- Do not like the colours in the area.
- Do not like the idea that the old storage building is planned to be demolished, feel it is important for the area.
- Noisy.

5.9.7. *The author's observation of the market*

The observer can:

SEE	<ul style="list-style-type: none"> • people waiting • parked cars • cars passing by • cars dropping off people • large trees • nice buildings • some of the river • some of buildings on the other side of the river • empty railway area towards Mølen
HEAR	<ul style="list-style-type: none"> • distant traffic • a train arriving • sounds from the electric wires on the track • wind blowing in the trees • birds • a “clanging” noise from the track
SMELL	<ul style="list-style-type: none"> • trees • pipe tobacco
FEEL	<ul style="list-style-type: none"> • quiet • empty • concealed • relaxed and comfortable

5.10. The fish market

The market contains:

- Lodging for small boats
- Parking space
- Service area
- Storage area
- Modest green area
- Busy vehicle road and junction
- Modest shopping area

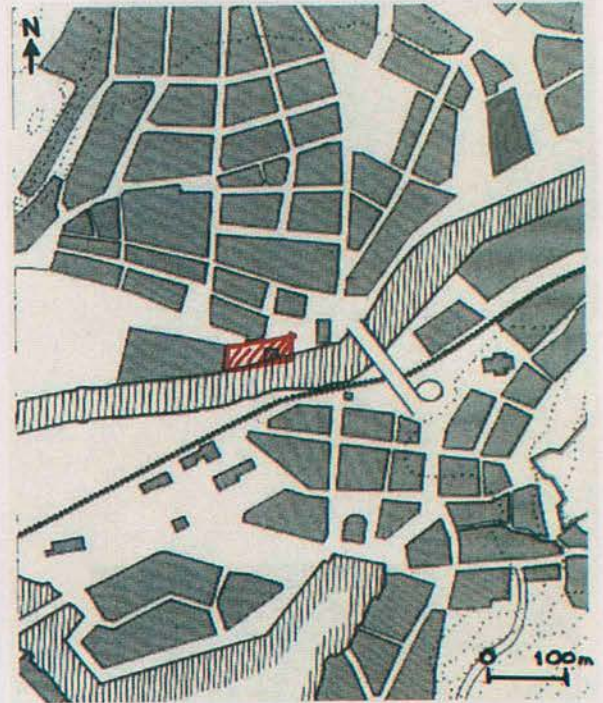
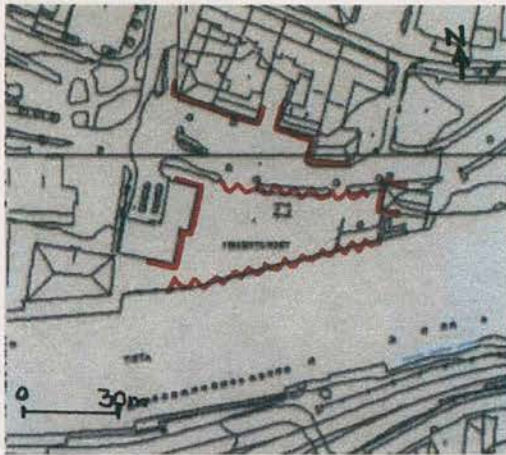
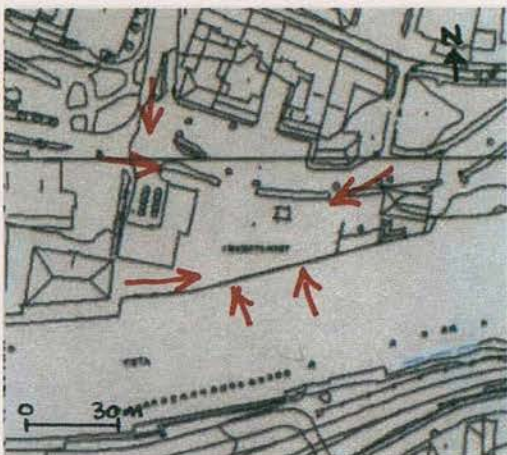


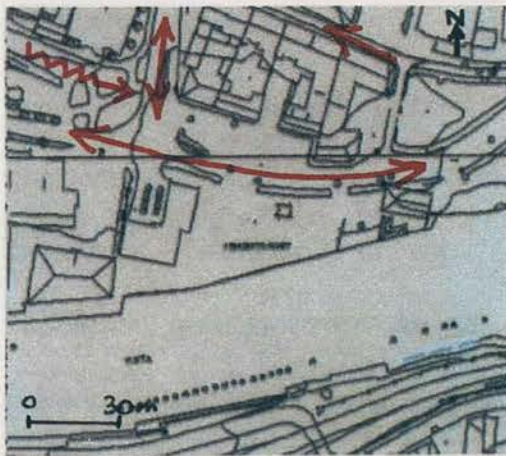
Figure 107. Location of the market.



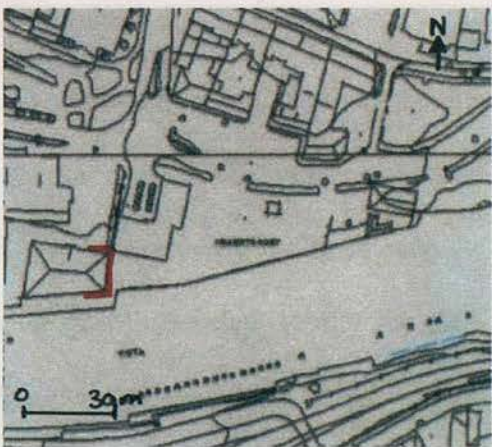
Edges in the area



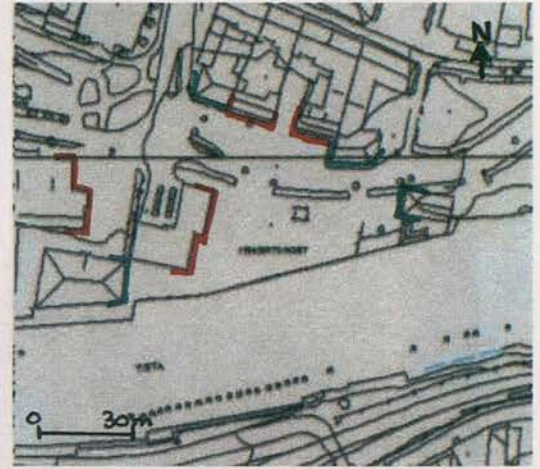
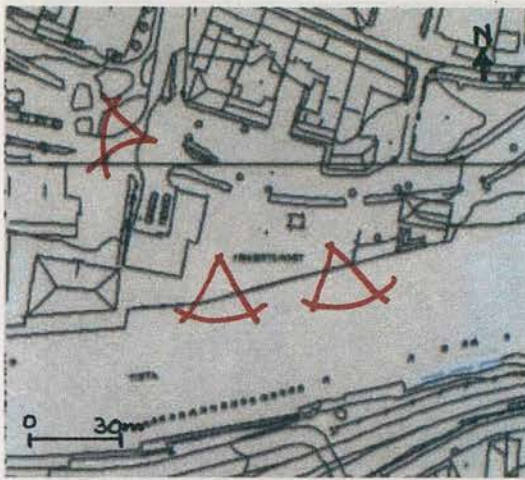
Access to the area



Pedestrian and car route



Listed buildings



Direction of view

Contrast of buildings, old (green) and new (red)

Figure 108. Space analysis of the space "today".

The fish market today is completely changed, being unrecognisable compared to the "old days", when this was an area filled with noise and excitement. The noise is still there, but it is now generated by the busy vehicle system, the great crossroads and the gasoline station that today occupy the fish market. A large part of the area is today a parking space.

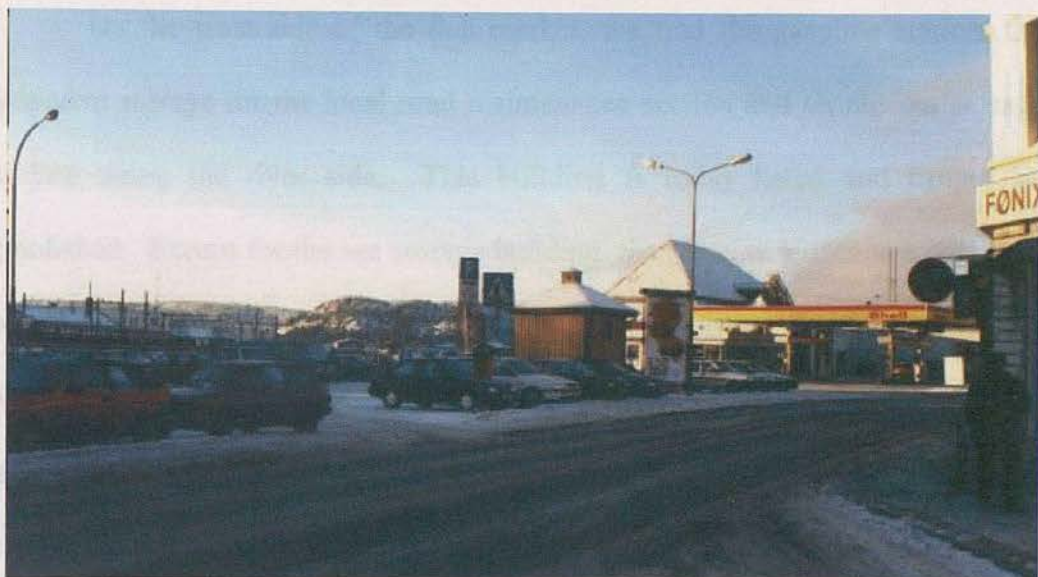


Figure 109. The fish market.

If we take a look at a picture taken today, we find that the great bazaar is gone. This building was demolished in 1957, to make way for the new car park. By transforming an area from a market to a parking space, you are replacing people with anonymous cars.⁴⁴ By doing this, the area is forced to change completely, and that is what gives the place the emptiness that is recognised today. The river is still used, but not for transporting timber logs as it used to be. Today, the river is used by small private boats, and they are stored along the river side.

The architecture surrounding the market is still very much the same. The architecture is still a mixture of the traditional Fredrikshald style and timber housing. Some buildings have burned down, and others have been demolished and redeveloped. The architecture has not been changed or been destroyed dramatically, but rather benefited from renovation.

⁴⁴ Jacobsen Frank Kiel, *Halden før og nå*, H Andersen Bok- og papirhandel AS, 1991. (p. 131)

On the west side of the fish market, we find the gasoline station, the equipment storage for the local road maintenance section and an old sea storage building along the river side. This building is today listed and cannot be demolished. Except for the sea storage building, the remains will face a complete transformation. A new plan of developments is responsible for this change. A 15,000m² shopping centre has been designed to occupy this part of the old fish market.⁴⁵ By this new development, the whole area will be transformed and the fish market will change. The fish market today is not recognised as a typical shopping area, but the buildings surrounding the market sell merchandise like fruit, chocolate, health foods, shoes and machinery. By increasing the shopping area with a large shopping centre, the area will be transformed into the main shopping area in the town. A need for a shopping centre in the town has been required for several years. One reason is that Norway has long hard winters and shopping centres are actually quite comfortable places to visit. The second reason is that people have the opportunity to do all their shopping in an indoor concentrated area. The third reason is that the inhabitants in the town currently happily drive to neighbouring towns to do this type of weekly shopping.

Since the shopping centres were developed in the neighbouring towns, most shops in Halden have suffered great losses. Customers are disappearing from the town and the shops go with them. The town cannot win customers back unless it evolves to provide similar shopping facilities for the customers. The new shopping centre is not likely to create a people-friendly town with people-friendly streets and spaces, but it is necessary to keep the inhabitants in the town, prevent it becoming a "ghost town". When the town is forced to adopt a shopping centre

⁴⁵ An article written by Torgeir Nakken, Halden Arbeiderblad, Haldens nye bydel, 11 Jan. 1996 (p. 40)

of this size, it is important to make it as compatible as possible. It is important that the centre functions become a part of the inner centre, and as an extension of the existing shopping area.

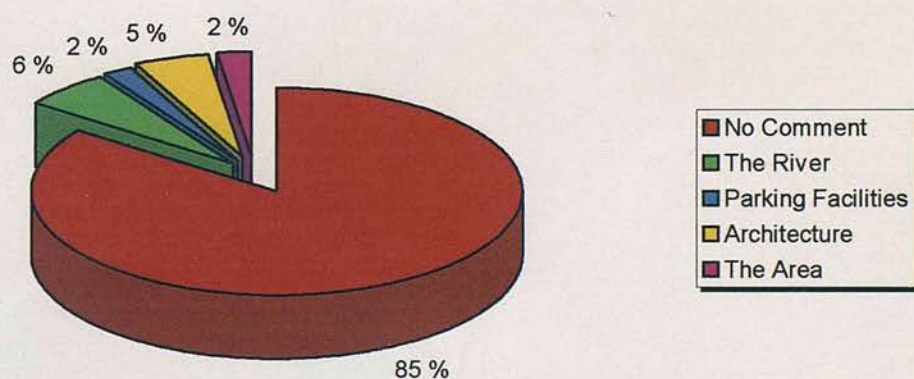
The location of the existing shopping area seems to be a matter of some confusion today because it is placed away from the inner centre. There is a gap between what the town planners want and what is considered to be a realistic shopping area. The main street has always been considered to be the main shopping area, satisfying weekly need. This has changed today, since two large supermarkets have been developed outside the town's inner centre. One is located at Høvleriet and another is located at Sørlifeltet. This results in "people getting used to travelling" for their shopping, which changes their shopping habits. The town planning office has, together with local business, tried several ideas to coax the inhabitants back to the main street. They have tried late open Fridays, "Super Saturdays", "Halden days" and open Sundays. They have also tried feast days and festivals. These are usually popular, but have at times not always attracted the desired numbers. They have tried to make the town more people-friendly, more car-friendly and more parking friendly. They have also tried to lower prices and expand the product range. However, it will always be difficult as long as supermarkets and shopping centres that attract people are located outside the town centre. It is a year-round problem. It is understandable that the local authorities agree to a shopping centre as the latest attempt to keep the inhabitants in town. It is very important that the centre is designed to interact well with surrounding architecture, especially since the area is an old valuable heritage area and most buildings are listed. It is also important that the centre is well integrated with the inner centre road and pedestrian system. If we move north from the fish market,

we find Oskar's gate. This is a street that has been neglected for a long time, and will need more attention in the future.

Same 150 respondents were asked:

5.10.1. What do you like and dislike most about the fish market?

LIKE:



5.10.2. Single comments from inhabitants:

- The area does not smell any more.
- The view of the river.
- Like the look of the new buildings.
- Like the history behind the market.
- Like the petrol station.